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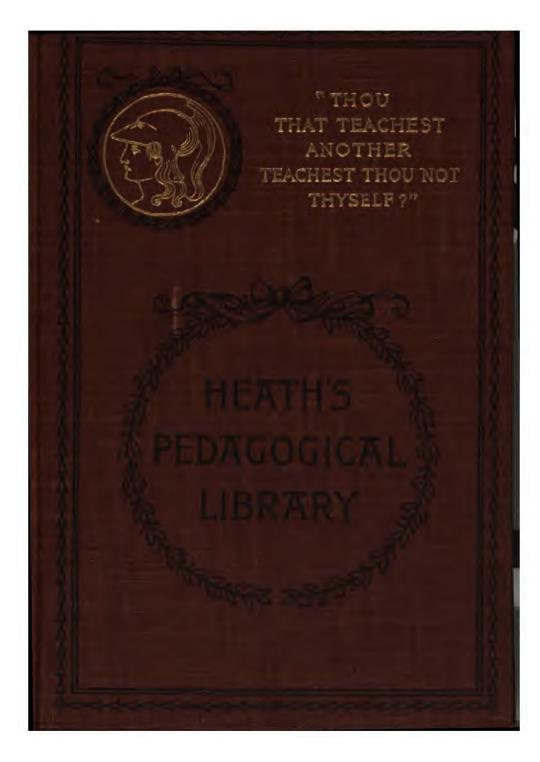
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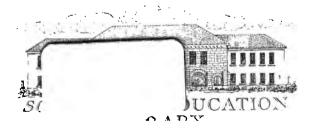
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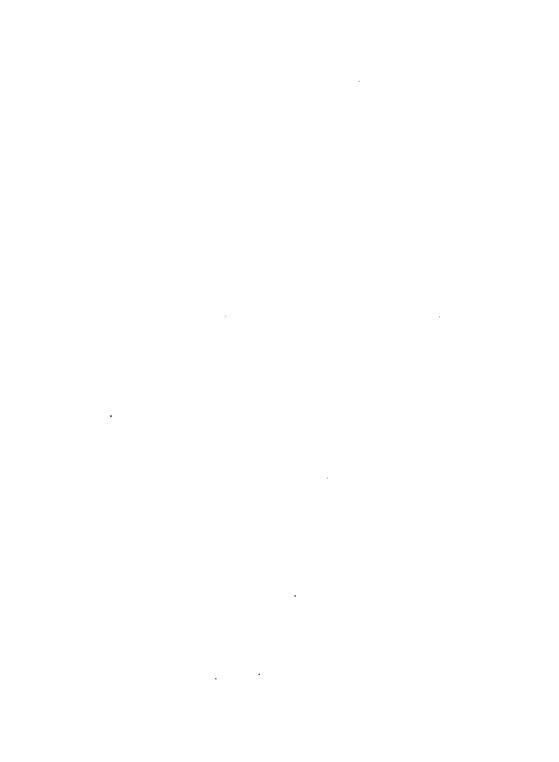




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THE

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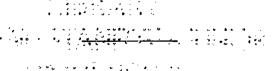
EDUCATION

BY

ANTONIO ROSMINI SERBATI

TRANSLATED BY

MRS. WILLIAM GREY



BOSTON

D. C. HEATH AND COMPANY

1903

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PREFACE.

THE work translated in the following pages was not published till after the death of the author, and is, in fact, only a fragment of a much larger work, which he had planned, and in which the education of the human being was to be carried on, through all the stages of life, on the principle of natural development here laid down and applied to infant education only. He rightly entitled it "The Ruling Principle of Method in Education," for it is the principle on which Nature herself works; and its applications, as given by Rosmini, and almost contemporaneously, though quite independently, worked out by Froebel, in his Kindergarten system, constitute the true art of education, founded on the science of human nature. I cannot better introduce the reader to the nature and scope of the work, and the history of its composition and publication, than by extracting the account given of them in the "Preface addressed to Italian Educators," prefixed to the original, by its editor, Francesco Paoli:-

"Towards the end of 1839 Antonio Rosmini undertook this work on Pedagogy, the occasion of his doing so being apparently the offer of a pious and generous-minded woman, Anna Maria Bolorgaro of Stresa, to intrust to the Institute of Charity (the order founded by Rosmini) the management of the elementary school which her grandfather had founded in that place, and which was, in fact, undertaken by the Institute in the following year. Rosmini's aim, however, was not to compose a mere manual for elementary schoolmasters, but rather a complete treatise on Pedagogy, and to give a new instance of the fecundity of his philosophical system and its application to the art of bettering human life, parallel to those he had already given in his 'Rights of Man' (Diritto), his

'Politics,' his 'Treatise on Conscience,' and in his ascetic works. Pedagogy is thus included among the sciences of application, directed to form a philosophical doctrine and to fecundate philosophy and render it fruitful. Rosmini rested it immediately upon Anthropology and Psychology, giving the knowledge of the human faculties to be educated and their modes of action; on Idealogy and Ethics, giving the objects, both proximate and ideal. by which the human faculties must be stimulated, in order to be properly educated; on Ontology and Theology, giving the knowledge of the ends towards which the human faculties should harmoniously tend, to find in them rest and full satisfaction, which is the ultimate goal of human education. Nor did Rosmini intend to treat only, as is generally done, of that part of human education which relates to childhood. He had in view also the adult and the old, the whole race, in short, because in the man, at every stage of life, there is something of the child; there is a new development going on within him, which requires to be guided and assisted that it may reach a successful issue, and the man learn to educate himself. Hence, Rosmini divided his subjects into periods of life, computed, not by numbers of years, but by the degrees of cognition which the human mind successively attains in its intellectual development. The first of these periods begins at birth, and includes about six weeks. No definite cognitions can be assigned to this period, although it must have the primary and fundamental cognition of being, without which the new-born infant would not be human, for it would not have the light of reason. . . . The second period begins with the first smile and tears of the infant, — that is, generally about the sixth week; and its cognitions consist only of the simple perception of things as subsisting, to which correspond the volitions, termed by Rosmini affective, instinctive, which have these things for their object. This period ends with the child's first articulate word, — as a rule, about the end of the first year. Speech is the sign that the child has entered the third period, and that he has attained the second order of cognitions, formed by analyzing the first, and by abstracting the more interesting, sensible qualities of things from the ideas of the things in his mind (imaginal ideas); and to these correspond the affective volitions, having for their object these

more interesting, sensible qualities abstracted from the actual things, and from the other qualities to which the appetitive faculty is indifferent. The fourth period begins usually at about three years of age, and shows itself in the aptitude to learn to read. We have now the exercise of the judging faculty, which has become capable of connecting by synthesis the elements of the previous analysis, and of affirming the existence in a subject of the qualities before abstracted, constituting the cognitions of the third order, to which correspond the volitions appraising the various objects of which these qualities are affirmed. This is soon followed by the cognitions of the fourth order, - consisting in the comparison made between two objects previously analyzed, - and the judgment of appreciation, giving the preference to one over the other. To this order of cognitions correspond the appreciative volitions, choosing between two objects; and the moral sense, which existed in germ in the preceding periods, now takes a larger development. About this time appears the first dawn of conscience, manifested in the volitions resulting from cognitions of the fifth order. These cognitions consist in a synthesis by which are determined the relations existing between two things combined into one, and conceived as one, of which conceptions the most important is that of the I and of self-identity. This period would seem to extend to the time when, as is commonly said, the child acquires the use of reason, or, as should rather be said, the free use of it, since the use of reason begins at the earliest period of life, and is manifested in the smiles and tears of the infant of six weeks old; for the brute neither smiles nor weeps.

"The work of Rosmini only reaches to this period. But from a short memorandum which I found written, in his own hand, on a small piece of paper, as was his custom, it would seem that he intended to treat of four following periods, which he would doubtless have subdivided, as before, by years of age. I found that, in the period from the seventh to the twelfth or fourteenth year, he proposed treating of the work performed by the mind through more and more developed reflection, towards attaining the conscious (reflective) knowledge of moral obligation and of law, to which corresponds a greater freedom of action. And I believe he would there have given the demonstration of what he had more

than once said to me, that on that period principally depends the moral character of the man, for good or evil, through life. For the young and inexperienced mind throws itself wholly and with undivided energy into the acts it performs, which thus have a greater fulness of life and force than those of adults. Hence, the first moral or immoral act, deliberately performed, stamps on the moral character a good or evil impression of such tenacity that it makes virtue more or less easy throughout the whole remainder of life. He then notes that the period of adolescence, extending from puberty to a little beyond the twentieth year, is that in which the youth, having attained sufficient reflective power and acquired clear notions of law, of duty, and of goodness, becomes master of himself, and can, and ought to, attend to the practice of private and individual virtues, by which he more and more educates himself. Then follows that other period of life in which the man applies himself to contemplate things as they are in themselves, rising thence to the thought of that which is eternal and necessary. Parallel with this thought, Rosmini appears to place the man's activity in working out the eternally beautiful through literature and the fine arts; in defending, by word and deed, the eternally just, and the inviolable rights of humanity; in giving aid and succor in various ways to his fellow-creatures; and, hence, he calls it the period of action. Finally comes the last period of life, which he names the age of counsel and the age of repose or wisdom, after which follows the decay of the man.

"From the fact that Rosmini approximately assigned to each period a certain definite limit of age, it is not to be assumed that the period or the capacity of individuals is to be determined by years of age. So far is this from being true, that we not unfrequently find youths who are men in sense, and men who remain childish triflers into old age. The periods are defined and made to depend necessarily on the orders of cognition; and, from the relation and graduation of the latter, we are shown how impossible it is to rise to the higher without having first passed through the lower.

"It was the intention of Rosmini, as appears from the title of the manuscript, to complete the work in five books; but unfortunately of these we have not quite two, the sixth section of Book II., which treats of the nature of the cognitions of the fifth order and the corresponding activities, but lacks the last two chapters, giving the instruction and education appropriate to that order. I had hoped to find some note or memorandum to supply, at least in part, this grievous loss, but my hope proved vain. I found nothing referring to the later books, beyond the memorandum given above, and, as regards the two missing chapters of the sixth section, only the following heads: 'Chap. III. Instruction. God, all-knowing, the rewarder of good and evil. Chap. IV. Education. Reason comes to the aid of obedience. Communication with the reason of others. How reason should correct sympathy. At this point the child should be guarded from temptations to falsehood. Means of cultivating truthfulness in the child. The rule against falsehood is ideal, and therefore weak. Ridicule is hurtful to children: things should be treated seriously. Praise and blame can be understood at this time. I think they might begin to be used then. If rightly bestowed, they help the conception of moral dignity. To give praise or blame earlier than this is useless, for they cannot be understood. Rule. — When the child has come to have moral principles and feels remorse, his conscience begins to give him a rule of action. In what the religious element of morality at that period consists.' This memorandum is so slight that I might have omitted it; but I have inserted it here, that I may be able to affirm that the manuscript is published entire, just as it was found."

Every reader of the above notices must share the regret of the writer, Francesco Paoli, that Rosmini has left us only a fragment of a work so nobly planned. It is clear that, had life or leisure enough been granted to him, he would have given the world—what it has never had yet—a complete method and art of education, based on the applied science of human nature, and having for its aim and end the full and harmonious development of the latter, to the measure of the stature of the perfect man. Fortunately, the earlier part, which is preserved to us, contains the fundamental principles both of method and practice, which remain the same for all periods of life, and of which only the application varies with the varying degrees of individual development. If the former are thoroughly mastered, together with their groundwork in the laws

viii PREFACE.

of human nature, the latter will be a comparatively easy task. I would point out here, what I have referred to in notes in various portions of the following translation, how far that task has been accomplished for us by Froebel, whose Kindergarten system, worked out by him in entire ignorance of Rosmini, and under conditions of birth, education, circumstances, so widely different, is yet the complete application, to every detail of infant education, of Rosmini's principles, or rather of the principles common to both, because both had arrived at them by the same road,—the profound study of human nature.

On one point only they differ; namely, as to the direct dogmatic religious instruction to be given to young children. This difference was inevitable between a priest of the Church of Rome, the founder of a religious order under Papal sanction, and a Protestant lay-teacher, devoutly religious, indeed, but not confining his faith within the four corners of any theological formula. Rosmini, as could not be otherwise, based the practical religious education of the child on instruction in the dogmas and formularies of the Church. Froebel, on the other hand, with a consistency impossible to his great contemporary, refused to depart in religious instruction from the fundamental principle of both, that children should never learn words representing ideas which their minds were incapable of conceiving; and thus, while his whole teaching was imbued with the spirit of religion and directed to lead the infant mind and heart to the love and adoration of God, he excluded from it all dogmatic formulas given in words which the child could not understand. I must be allowed here, in justice to myself and my own profoundest convictions, to express my emphatic dissent from my author in this matter, not only as to the method of his religious instruction, but as to its matter, where that involves any of the distinctive dogmas or practices of the Church of Rome. I could not have undertaken this translation, had I not been permitted to make my standpoint on this question perfectly clear, and to enter this protest against any supposed acceptance of those passages of the work which inculcate such dogmas or practices. They are, indeed, singularly brief and rare in this fragment of the much larger work which Rosmini had projected, in the later portions of which dogmatic religious teaching would, we can scarcely doubt, have taken a larger place; but, slight as they are, I feel bound in honesty to record my dissent as an individual from what I render as a translator.

I have striven to make my translation as faithful as possible. Only in one or two instances I have omitted notes that had no interest for any but Italian teachers, as referring to Italian schoolbooks, now out of date, or that gave redundant quotations in support of points fully established already. I have also occasionally condensed my author's somewhat diffuse illustrations; but in no case have I omitted or altered anything in the substance or logical order of the text. I may add, that for such slight variations and omissions as I have made I had the full sanction of an eminent member of the Rosminian Order, at whose request I undertook the translation.

I cannot close this Preface without expressing my deep obligations to Mr. Thomas Davidson, who, when I was disabled by severe illness from continuing the correction of the press, most kindly undertook it for me, and superintended the final revision of the whole work,—a task for which his profound knowledge of Rosmini peculiarly qualified him, but which I cannot sufficiently thank him for undertaking in the midst of his own engrossing literary labors. He will find a better reward than my poor thanks in the consciousness that, without his aid, the English-speaking public would have been deprived for an indefinitely longer time of so valuable a contribution to the science and art of education as that afforded by the great Italian thinker in the work of which this is a translation.

MARIA G. GREY.

ROME, January, 1887.



TABLE OF CONTENTS.

PAGE
SKETCH OF THE LIFE OF ANTONIO ROSMINI xix
INTRODUCTION
BOOK I.
ON THE RULING PRINCIPLE OF METHOD.
Chap. I.— On the gradations which must be observed in the mental operations required of children
Chap. II.—The gradation of mental operations depends on the gradation of objects to which the attention of children is directed
CHAP. III.—On the natural order in which objects present themselves to the human mind, first discerned in classification 15
CHAP. IV.—Continuation.—Method of teaching children the classification of things
CHAP. V. — Continuation. — Order in which objects present themselves to the human mind in the local distribution of things 29
Chap. VI. — On the natural order in which objects are presented to the mind in abstract reasoning
CHAP. VII.—Recapitulation
Chap. VIII. — Natural and necessary order of intellectual action 38
CHAP. IX. — Ruling principle of method

BOOK II.

ON THE APPLICATION TO LITTLE CHILDREN OF SERVICIPLE OF METHOD.	THE
	PAGE
SECTION I.—On the Necessity of Classifying the Cognitions of the Human Mind according to their Order	41
SECTION II On the Cognitions of the First Order and	
THE CORRESPONDING STAGE OF EDUCATION	45
CHAP. I.— Which are the cognitions of the First Order	45
ART. I. — What is the stimulus which primarily excites the	
intellectual attention of man?	47
Art. II. — What is the object of the primary cognitions?	47
Art. III.—What are perceptions?	48
ART. IV. — Of what improvement the human perceptions are	
capable ·	51
Art. V.—To the First Order of cognitions besides percep-	
tions belong also the memory of perceptions; the imaginal	
ideas; the associations of the three species enumerated,	
together with the whole action awakened by them in the	
mind	56
CHAP. II. — On the activities which respond to the First Order of	
cognitions	59
Art. I.— Distinction between the two first periods of child-	00
hood	59
ART. II. — Activities proper to the First Period	61
ART. III. — Activities proper to the Second Period	66
	00
CHAP. III. — On the education and instruction of the child through	
the two first periods of life	73
Art. I.—On Religion	73
Art. II. — The acts of the will are stronger in childhood than	
in adult years	74
ART. III. — The tendency of education in early childhood	
should be rather to cultivate feeling and volition than in-	
tellect	76
ART. IV. — The actions produced by the animal feelings are	
connected by the laws of nature: the earliest volitions, and	
the intellectual feelings consequent upon them, are in them-	
galvag digaannaatad	77

CONTENTS.	xii
	PAGE
ART. V.—Observations and experiments the child should be led to make	79
the child	80
for this purpose	80
the child	81
SECTION III. — On the Second Order of Cognitions and	
THE CORRESPONDING EDUCATION	84
CHAP. I.—Third period of childhood	84
CHAP. II,—What are the cognitions of the Second Order	85
ART. I.—What are the cognitions of the Second Order in general	85
too high an order, the other because it does not attract the attention, which lacks the necessary stimulus Arr. III.—What is the motive which impels the child	85
towards cognitions of the Second Order	89
impels the child's intelligence	91
through language	91
given to the child through language	93
§ 1.—Abstractions formed immediately from sensible things	96
§ 2.—First classification of sensible things	104 106
CHAP. III. — Development of the active faculties in the Third	
Period of childhood	107
CHAP. IV. — Of the teaching corresponding to the Second Order	
of cognitions	112
ART. I. — Four errors to be avoided by teachers ART. II. — The gain to the mind from the regularity with which percentions and imaginal ideas have been imported.	112
which perceptions and imaginal ideas have been imparted in the preceding period	173

***	GE
ART. III. — Matter and instrument of instruction, — language 1	114
§ 1. — The child should be taught to name the greatest	
•	114
<u>.</u>	114
•	115
	117
34.—Continuation.—At unicial practice	
CHAP. V.—Education of the active faculties corresponding to cognitions of the Second Order	125
3	120
ART. I. — Difficulty of determining which should be the nega-	
	l25
ART. II Difficulty of determining how much the teacher	
should give the child and how much he should require from	
	127
Art. III. — What is the moral rule of the child arrived at	
·- · · · · · · · · · · · · · · · ·	133
ART. IV. — Can the morality of the child be injured while he	
is still in the second stage of cognitions?	138
ART. V. — How to make use of the child's faculty of belief, to	
incline him to moral goodness	42
Art. VI. — Other means towards the same end 1	l 4 3
ART. VII On resistance, considered in relation to the	
	146
0.1 Emerging of maticular which many he required of the	
§ 1. — Exercise of patience which may be required of the	47
	147
9 · · · · · · · · · · · · · · · · ·	147
0	149
§ 4. — Removal of the limits too easily set to the benevolent	
affections	150
ART. VIII Acts of religious worship which the child should	
	160
SECTION IV. — On the Cognitions of the Third Order and	
	166
	.00
CHAP. I.—The Fourth Period of childhood, and the difference	
between the periods and the orders of cognitions	166
CHAP. II. — On the mental progress made at that age with regard	
to the cognitions of the preceding orders and the concomitant	
	168

CONTENTS.	X.V
	PAGE
CHAP. III. — On the cognitions of the Third Order	169
ART. I What are the cognitions of the Third Order in	
general?	169
ART. II Method we shall follow henceforth in the exposi-	
tion of human development	171
ART. III. — Processes by which the mind arrives at cognitions	
of the Third Order	173
§ 1.—Cognitions of the Third Order are always reached	
through synthetic judgments	173
§ 2. — What is contributed by analytic judgments to the	
Third Order of cognitions	176
§ 3.—Catathetical ratiocination at this period	178
Arr. IV. — Objects of the cognitions of the Third Order	179
§ 1.—Reality and ideality	179
A. Collections, numbers	179
B. Definite principles	186
§ 2. — Morality — moral principles	189
CHAP. IV Development of the active faculties in the Fourth	
Period of childhood	192
Art. I. — Increase of spontaneous activity	192
ART. II. — Desultoriness of action	194
Art. III.—Play	195
Art. IV. — Moral activity	197
CHAP. V The instruction corresponding to the cognitions of	
the Third Order	202
ART. I What is meant more fully by instruction corre-	
sponding to a certain order of cognitions	202
ART. II.—The language and style to be used by the teacher	202
Art. III. — Matter of instruction	204
§ 1. — Action	204
§ 2. — Oral exercises	204
§ 3.—Teaching by pictures	210
CHAP. VI The moral education corresponding to the Third	
Period	211
ART. I. — On the objective principle and the subjective prin-	
ciple on which the child acts at this period	211
ART. II. — On resistance, considered in relation to the child	
in the Fourth Period	212

•

CONTENTS.

P	AGE
Art. III. — Divine worship	216
SECTION V.—THE COGNITIONS OF THE FOURTH ORDER AND THE	
CORRESPONDING EDUCATION	217
CHAP. I. — Cognitions of the Fourth Order	217
ART. I. — Classification of the cognitions of the Fourth Order	217
ART. II. — Mental processes in the formation of cognitions of	
the Fourth Order	218
§ 1. — Analytic judgments	218
§ 2. — Synthetic judgments	220
§ 3. — Hypothetical ratiocination	221
Art. III. — Objects of the cognitions of the Fourth Order .	222
§ 1. — Reality and ideality	222
A. Differences	222
B. Numbers	223
C. Collections	224
D. Means and end	224
E. Intellectual perception of one's self (of the I proper)	224
F. Time	232
G. First definite principles drawn from the ideas of	00/
actions	234 245
§ 2. — Morality, moral principles, conscience § 3. — Idea of God	250
§ 5.— Idea of God	200
CHAP. II Development of the active faculties of the Fourth	
Order of cognitions	254
ART. I.—With the Fourth Order begin appreciative volitions	256
Art. II.—Freedom	256
ART. III. — How belief and docility naturally increase in the	
child	258
Art. IV.—Desire to influence others	260
Chap. III.—Instruction adapted to the Fourth Order of cognitions	26
ART. I How language should be the foundation of all in-	
struction of the young	26 :
Art. II. — Exercise of external activity, of imagination, mem-	
ory, and the affections	26
Art. III. — Oral exercises in this period	26
ART. IV. — Instruction in reading and writing	260
Apm V Anithmetic	97/

CONTENTS.	xvii
Ann IVI Unification of ideas and thoughts	PAGE
ART. VI. — Unification of ideas and thoughts	270
§ 1.—Association of ideas	272
§ 2. — Order of ideas	275 278
·	
CHAP. IV. — Moral education corresponding to the Fourth Order	
of cognitions	283
ART. I. — The child's credulity should not be abused	
ART. III.—On maintaining the rectitude of the child's con-	
science	287
§ 1.—How the will of the educator, which is the child's	
supreme law, should be good	
§ 2.—The will of the educator, being the child's supreme	
law, should be good with a goodness the child can	
recognize	
§ 3. — How the child should be led upwards from the knowl-	
edge of the goodness proper to the human will, to	
knowledge of the goodness proper to the Divine will .	295
SECTION VI. — THE COGNITIONS OF THE FIFTH ORDER, AND THE	
Education corresponding to them	300
CHAP. I.— The development of intelligence which takes place in	
the Fifth Order	300
ART. I. — Processes by which cognitions of the Fifth Order are	
formed	301
§ 1. — Synthetic judgments of the third species	
§ 2.—Analytic judgments of the Fifth Order	
§ 3. — Disjunctive ratiocination	305
ART. II. — Objects of the cognitions of the Fifth Order	307
§ 1.—The real and the ideal	307
A. Numbers	307
B. Order of value between objects	307
C. Time	308
D. Cognition of the I	309
§ 2. — Morality, moral principles	
A. Beginnings of remorse and conscience	
B. Moral principles in the fifth order. — Duty of moral	
fortitude	316

.

CONTENTS.

· •	PAGE
C. Duty of honoring the will of the most worthy before all others	318
D. Beginning of abstract moral principles, as distin-	910
guished from the concrete	323
E. Increased difficulty of right moral conduct, from the	
appearance in the mind of abstract moral standards	326
F. Difficulty of perfect truthfulness for the child	328
G. How the three categorical moral principles begin to	
manifest themselves clearly at this period	332
§ 3. Notion of God	333
CHAP. II. — Development of the active faculties and of the moral	
condition of the child in the Fifth Order of cognitions	334
Arr. I. — Development of the child's imagination; mainly	
caused by definite principles regarding the action of things	334
	004
ART. II. — Moral advantage of the development of the imagi-	0.40
nation	340
ART. III. — Moral injury from the development of the im-	
agination	345
ART. IV. — Self-consciousness of the child at that age, consid-	
ered in relation to morality. — Moral injury. — Selfishness	353
Art. V.—Continuation.—Two degrees of selfishness	355
Art. VI. — Continuation. — Judgment by two measures. —	
Childish artifices	356
ART. VII. — Moral apathy and restiveness	357
ART. VIII. — Moral advantages of self-consciousness	359
Art. IX. — Continuation	360

SKETCH

OF THE

LIFE OF ANTONIO ROSMINI.1

Antonio Rosmini Serbati was born on the 25th of March, 1797. at Rovereto, in the Italian Tyrol. His father, Pier Modesto Rosmini Serbati, belonged to an old, wealthy, and noble family, originally called Aresmino or Eresmino. His mother was a Countess Giovanna dei Formenti, from Riva, on the Lake of Garda. Both, like many of their ancestors, were cultivated, generous, and pious people, zealously devoted to the service of the Church, but do not seem to have been in any other way remarkable. Antonio was a delicate and finely organized child, and very early showed signs of those virtues of head and heart for which he afterwards became remarkable, as well as of that religious and devotional tendency which gave aim to his whole life. Being fond of study, he entered, when still very young, the gymnasium of his native town, and there so distinguished himself that the rector was able to predict, in no indefinite terms, the boy's future greatness. After leaving the gymnasium he remained two years at home, studying mathematics and philosophy, for both of which he early displayed great tendency and capacity. It was in the course of these two years (1815-1816) that two of the most important events in Rosmini's life took place, - the discovery of his philosophical principle, and his determination to enter the priesthood. Firm in the latter resolution, and having overcome the strong opposition of his parents, he left

¹ This sketch is a summary of that given by Mr. Thos. Davidson in his work, "The Philosophical System of Antonio Rosmini Serbati" (London, Kegan Paul & Co., 1882; Boston, Ginn & Co.), which I recommend to the perusal of all who wish to make themselves acquainted with the nature and extent of the services rendered to philosophy by one of the greatest thinkers of modern times, so little known as yet out of his own country.

Rovereto in 1817, and began his theological course at the University of Padua. In 1820 he lost his father, who left him heir to the bulk of his very considerable property. In 1821 he was ordained priest, and celebrated his first mass at St. Catherine's in Venice.

From 1820 to 1826 Rosmini spent the greater part of his time at his home in Rovereto. It was during this time that the two great purposes which shaped his whole subsequent life became clear to his mind, — the working out of a coherent system of truth, which should be a basis for revealed theology, and the founding of an institution which should train teachers, and especially priests for the Church, in holiness, charity, and wisdom. At first he meant that it should consist of laymen, but afterwards concluded that an association composed in part of priests would be more useful. In February, 1828, he left Milan, where he had mostly lived since 1826, and retired to Domodossola, a small but beautifully situated town in the Piedmontese Alps. Here he led the life of an anchorite, feeding on boiled herbs, frequently fasting, sleeping on a couch of leaves, and spending his time in prayer, meditation, study, and writing. His naturally delicate health broke down under the strain, and he never fully recovered. It was here that, kneeling before a crucifix, he wrote the Rule of his order, and here that he composed a large part of his first important work, "The New Essay on the Origin of Ideas" 1 (Nuovo Saggio sull' Origine delle Idee), which was printed during his subsequent stay in Rome from November, 1828, to March, 1830, and which at once established his reputation as the ablest Catholic philosopher of his time, and was almost immediately introduced as a text-book into many schools and seminaries, even, it should seem, into those under the control of the Jesuits. During this stay in Rome he received great encouragement from the Pope, Pius VIII., to pursue his philosophical studies, and took steps toward obtaining the approval of the Holy See for his new order.

From 1830 to 1834 Rosmini lived partly at Domodossola, partly in Trent, where he had been invited to found a house of his order. In these years he wrote his "Principles of Moral Science," part of his "Supernatural Anthropology," and in 1832 his now famous "Five Wounds of Holy Church." In 1834 he was called by the clergy and people of his native city, Rovereto, to take charge of the congregation

¹ Translated into English, and published by Kegan Paul & Co., London, 1884.

of St. Mark's there; but, finding himself hampered in his efforts to improve the moral and spiritual welfare of his parishioners by the jealous opposition of the Austrian government, he resigned his charge in 1835, and at once returned to his previous mode of life. But the Austrian government, having once had its attention called to his work in Rovereto, began to look with suspicion on his efforts generally, and to endeavor to counteract them. With this purpose, it first forbade all connection between his house at Trent and any foreign house. meaning the one at Domodossola, and finally succeeded in breaking it up altogether. This hostility to Rosmini was sharpened by the influence of the Jesuits and their friends, who saw in his enterprises possible dangers to their order. From that time until now the persecution of Rosmini and his followers at the hand of the Jesuits has never ceased even for a moment. Freed from parochial duties, Rosmini during the years 1836-37 moved a good deal from place to place, trying to secure a footing and sympathy for his order, and to defend the groundwork of his philosophy, which was already vigorously attacked, not only by the Jesuits and their friends, but also by learned men of rationalistic and anti-Catholic tendencies. In these years he was able to found a mission in England, and also to establish, at the Sacra of St. Michele in Turin, a religious house, to which he transferred, for a time, the novitiate of his order.

In 1837 Rosmini, tired of Austrian surveillance, took up his abode at Stresa, on the western shore of the Lago Maggiore, which remained his home for the rest of his life. His institution, in spite of bitter opposition, received in 1839 the formal approval of Pope Gregory XVI., his old and steadfast friend, and continued to increase in strength and numbers. He was able also to vindicate his philosophy from the formidable attacks of Count Mamiani, the able and zealous Italian patriot, who acknowledged his defeat in the most generous terms, and of Vincenzo Gioberti, the great priest-patriot and patriot-philosopher of Italy, who also lived to admit that he had misjudged him altogether. His reply to Gioberti appeared in 1848, that year of so many changes, when Italy was struggling to free herself from the bonds of the hated Austrian. Rosmini is usually spoken of as one of the initiators of the movement which ended in the emancipation and union of Italy; and it is true that he sincerely longed to see Italy delivered from the Aus-

trian; but, like a good, consistent Catholic, he hoped this deliverance would result in placing the country under the control of the Pope. It was this longing and this hope that stirred up the interest which he felt in the political movements of that troubled time, and induced him to take part in them.

In 1848 Rosmini wrote his "Constitution according to Social Justice," and published his "Five Wounds of Holy Church," written as early as 1832, the ultimate aim of both being to procure for the Pope an inalienable preponderance in the government of Italy, and to make Catholicism a leading article in her constitution. Shortly after the publication of these works the Piedmontese government offered Rosmini. whose influence at Rome was supposed to be great, an appointment as special envoy to the Holy See, in order to obtain the countenance and aid of the Pope, then Pius IX., in the prosecution of the war against the Austrians. Rosmini accepted the mission with readiness, but unfortunately, while the government which appointed him contemplated an armed alliance of princes, capable of offering immediate resistance to the Austrians, what Rosmini meant to labor for was a permanent confederation of states, with the Pope as ex officio president. The government, however, was induced by Gioberti to adopt for a moment Rosmini's plan, and, with a vague understanding to this effect, Rosmini started for Rome, where he was most graciously received by the Pope. appointed a Consultor of the Congregation of the Index, and promised a Cardinal's hat, and immediately began to carry out the object of his mission, as he was fain to understand it. But the Piedmontese government, fearing that his plan, which was approved by the Pope and the Duke of Tuscany, might prove successful, sent him instructions to abandon it and confine himself to the project of an armed alliance. This led to Rosmini's resignation, at the end of seven weeks, the effect of his influence upon the Pope having been to prevent his listening to the Piedmontese proposal, and to confirm him in his resolution to take no direct part in the war. This resolution brought about the crisis which began with the foul assassination of the minister Rossi, and ended with the Pope's flight to Gaeta. In the interval between these events Rosmini, who was supposed to represent the views of patriotic Piedmont, was suggested as a member of the liberal ministry forced upon the Pope, and was by him made president of it,

with the portfolio of Public Instruction. But Rosmini's almost morbidly scrupulous conscience, his sense of incapacity, and, more than all, his fear that his appointment had been made under pressure, and would place him in a false position with the people, induced him to decline the nomination and keep himself out of the way. For whatever reason, his influence with the Pope ceased from that moment. Nevertheless, he followed him in his flight to Gaeta, but found his position there, exposed to the malign suspicions of Antonelli and the party in favor, so uncomfortable, that he betook himself to Naples, thus leaving the field open to his enemies. The latter, aided by the Neapolitan government, which, for reasons of its own, persecuted him during the whole time he remained within the limits of its jurisdiction, succeeded in calling at Naples an irregular meeting of the Congregation of the Index, which pronounced a decree prohibiting his recently published works, "The Constitution according to Social Justice" and "The Five Wounds of Holy Church." Rosmini, though a Consultor of the Congregation, was not informed of this meeting, nor was it till some months later, when he had withdrawn to Albano from the petty persecutions of the Neapolitan government, that he received the news of the prohibition. He submitted to it at once without protest, and offered to withdraw his books from circulation; but this was not deemed necessary. His enemies had succeeded in surrounding his name with an odor of heresy, and they were satisfied. He shortly afterwards returned to his home and his former saintly life at Stresa. He lived but seven years more. During these he devoted himself exclusively to the care of his institute and the composition of works forming part of his great system of truth. His enemies, who had been baffled for a time by his hearty submission to the decree prohibiting his two patriotic works, now began a systematic process of calumniation, in order by mere reiteration to convince the Pope that Rosmini was a heretic, and a man dangerous and hostile to the cause of the Holy See. To their dismay, however, they soon found that they had overshot their mark. The Pope knew him personally, and before that knowledge calumny fell dead. Besides, being now restored to his throne, and free to think for himself, Pius IX. saw that he had deeply wronged Rosmini, and resolved to make what reparation was in his power, by giving him a fair hearing. He first enjoined silence on Rosmini's enemies, and then had the whole of his published works submitted to the most careful scrutiny. The result of this process, which lasted nearly four years (1851 – 54), was that at a meeting of the Congregation of the Index, the Pope presiding in person, it was declared that all the works of Antonio Rosmini Serbati, lately subjected to examination, were to be dismissed as free from censure, and that, on account of the said examination, no obloquy should attach either to their author or to the institution founded by him, "de vitæ laudibus et singularibus in ecclesiam promeritis." The Pope then enjoined perpetual silence on Rosmini's enemies, whose fury in consequence knew no bounds, and from that day to this has not exhausted itself.

Rosmini did not live long to enjoy the satisfaction he must have felt. He died the death of a saint, at Stresa, on the 1st of July, 1855, not without suspicion of having been poisoned. His remains rest in the crypt of the Church of the Holy Crucifix, which he built. Over it is a handsome monument by Vela, representing Rosmini on his knees, in the attitude in which he wrote the Rule of his order. In the college attached to the church is the working part of his library, his manuscripts, and many interesting relics of him.

In regard to the institution which he founded, a few words must suffice. Its proper title is the Institute of the Brethren of Charity (Istituto dei Fratelli della Carità); but its members are better known by the shorter name of Rosminians. The fundamental principle of it is complete surrender of the will to the will of God, waiting in faith on the promptings of the Holy Spirit, and its aim the moral perfection of souls through obedience to every law human and Divine, natural and revealed. The principle of all action is to be charity, material, moral. intellectual, "the love of the good, of all the good." The Brethren of Charity undergo a two years' novitiate, take the three monastic yows of obedience, poverty, and chastity, wear no distinguishing habit, and conform to the laws of the country in which their lot may happen to be cast. Each retains a sort of title to his own property, but makes a continual sacrifice of it, by disposing of it as the general of the order enjoins. The order, as such, owns no property. In spite of unscrupulous opposition, it is in a fairly prosperous condition, and if its members are not numerous, those who have entered it are among the most human-hearted men and the truest Christians that the present world has to show. They are almost exclusively Italians or Englishmen. The order has two novitiates, one at Domodossola in Piedmont, and one recently removed from Rugby to Wadhurst in Sussex (England). It has also several colleges and religious houses in various parts of Italy and England.

"When we say," writes Mr. Davidson, "that Rosmini was a saint and a thinker of the very first order, we have given in brief the main features of his character. A man who, without courting publicity or fame, labored for forty years to do the good as he understood it. The good which he sought to do met with many obstacles in his lifetime, and many more since that came to a close; but his order still keeps alive his spirit of piety, hope, and charity, and his works, in spite of all wilful misrepresentations, calumny, and denunciation, are slowly, but surely, extending their influence in every direction where influence is desirable. We may differ with him in many, even fundamental, views and beliefs; but we need not, and certainly shall not, thereby be prevented from admiring his purity of heart, his unselfishness and tenderness, his singleness and indivertibility of aim, the vastness of his knowledge, and the penetrating force of his intellect. Neither need we be deterred by theologic prejudice from examining his works, and respectfully accepting the truths they contain. By such acceptance we shall be hastening the justice which time is certain, sooner or later, to accord to him and them."1

¹ The Philosophical System of Antonio Rosmini Serbati, by Thos. Davidson, pp. xlviii., xlix.



ON THE RULING PRINCIPLE OF METHOD.	



INTRODUCTION.

- 1. Method is a part of logic, and, if taken in all its bearings, may be said to be itself logic, since the aim of the latter is throughout to establish the method of conducting our reasoning processes. But the present work does not consider method under this wide extension of its meaning. We must begin, therefore, by laying down the limits within which we shall confine our essay.
- 2. The human mind has truth for its object, and, in relation to this most noble object, it exercises various functions. Some of these functions relate to truth already known; others, to truth which is still unknown, and the knowledge of which is sought for.
- 3. The functions of the mind, in relation to truths already known, may be reduced to three, namely, 1. The communication of it to others; 2. The defence of it; and, 3. The disentanglement of it from error.
- 4. The functions of the mind, in relation to truth as yet unknown, and which it seeks to know, may also be reduced to three, namely, 1. To find the demonstration of the truths known; 2. To find the consequences to be derived from them through their development and application; and, 3 and lastly, to attain through the senses, by observation and experience, new data on which to base entirely new arguments.
- 5. Each of these functions of the human mind has its own method, which consists of an assemblage of rules for the guidance of the mind itself in the performance of its work:

hence we may distinguish six kinds of method, as we have distinguished six functions of the mind in relation to truth.

6. These are, the method of exposition, which teaches how best to impart our knowledge to others; the polemical method, which teaches us how to defend truth and repel its assailants; the critical method, which teaches how to separate the true from the false. These are the three methods which must govern our mental processes in relation to truths already known. The remaining three are, the demonstrative method, which gives the rules for arriving at exact demonstrations; the inductive, which teaches how to reach the truths yet unknown, through inductions and conclusions from the known, developing from the knowledge we have ascertained in germ, as it were, the far larger body of that which we do not know; and, finally, the method we shall call the perceptive-inductive, which is not satisfied with arriving at new cognitions by inductions and conclusions from previously known data, but which leads us to the discovery of wholly new data through the perception of new phenomena, skilfully produced and made apparent to our senses. These are the three methods which govern the functions of the mind in relation to truths yet unknown. The last alone is the experimental method proper, the Baconian, to which is due the immense progress of physical science in modern times.1

¹ It is an error to believe that each of these methods has a mode of reasoning special to itself. Lord Bacon was wrong in his notion that, in the perceptive-inductive method, induction should be substituted for the syllogism. His inaccurate dictum was, however, repeated as an echo from one end of Europe to the other without arousing distrust in any quarter. The truth is, that every induction necessarily includes a syllogism, and that the syllogism is the intrinsic form of all human reasoning alike, not confined to one special method of reasoning, but common to all methods. There is, however, a basis of truth in the Baconian doctrine, although its expression is erroneous, and it is this: It is true, 1. That, in the exposition of physical and experimental facts, it is unnecessary to use the syllogistic form, which would be long, tedious, and pedantic; 2. That the progress of the physical sciences does not depend so much on reasoning as on the new data, the new phenomena which are discovered by observation and experiment, so that the reasoning process serves principally to guide the observer and experimenter towards the discovery of the new facts he is looking for.

7. Now, of all these methods, the first alone, which gives the rules for imparting truths to others, is the subject of the present work. The rest require special treatises, all, however, being, as we have said, included under logic, of which this essay does not pretend to be more than a fragment.

But, besides being a fragment of the science underlying the art of logic, it is also something else, — I will venture to say, something more.

8. The expository method, which is the subject-matter of the science of correct reasoning, gives the rules by which our knowledge can be duly imparted to others, and is therefore the method which governs teaching in general. But, the method being given, the master or teacher, whoever he be, must himself apply it to his scholars; and that application, that use of the rules of method by the master in dealing with his pupils, is in itself an art having fixed principles, the distinct knowledge of which is most useful to him. gather up, order, and simplify these principles is the business of pedagogy, the science which gives the rules of the great art of education. It is to this science of teaching that we have turned our thoughts. Caring little to bring out through subtle research merely speculative laws of thought, we should leave such an undertaking to others richer in leisure than ourselves, were nothing further involved in the matter. But we are urged on by the needs of so many deserving teachers, who daily confess having to proceed tentatively, without sure guidance, in the vast and perilous field of instruction, and constrained by their complaints over their wasted labor. We are moved also by our affection for the young, and by charity towards our kind, — towards. humanity ever perishing through age and decay, and ever renewed in the fresh and vigorous life of new generations. These, like green shoots from an old trunk, promise at first all charms of beauty, all abundance of fruit, but soon fall

away and wither from want of proper treatment,—of able hands to shield them from external injury, to uphold and strengthen them in their weakness, to save them from sinking miserably downwards, to get lost and choked among the briars and brambles, and creep and rot, leaving their race no better, if not worse, than before.

9. It is a fact that, at the present time, the want of a clear and well-grounded method is universally felt in our schools. The principles of such a method are being widely sought. and gradually discerned and gathered up, partly from the meditations of the ablest intellects, partly from the experience of the best teachers. This should be an encouragement to all who are laboring in the same field and can hope to do something towards supplying this great need, to throw themselves into the common work with all the strength they have. At the same time, it is evident, from the differences of opinion and aims, and the diversity of ways adopted by individual educators, as well as by their disputes among themselves, that the art of method is still wanting in a firm basis accepted by all, and which could, when understood. be rejected by none. Even the governments which have undertaken the direction of education, and possess all the requisite authority, still proceed with uncertain steps: and while, on the one hand, the education under the control of the state is carried on with greater regularity, on the other the schools placed under these uniform and unchangeable rules are almost always the last to admit improvements, and either oppose any attempt to introduce them, by excluding the experiments which might lead to them, or, if any foreign discovery be adopted, its external form only is taken, while the kernel and inner spirit of it is left aside. These are the reasons which have determined us to give this work rather a pedagogic than a logical character, and, although, in so far as it deals with the principal rules of the expository

method it belongs to the art of thinking, yet, by taking those rules, and applying them in the first instance to the teaching of youth, it becomes a part of the art of education.

- 10. Whether we have attained the object we have set before us in this book it is not for us to judge. alone, which develops the seeds of doctrine cast by authors into the field of human society, as it develops those cast by the husbandman into the earth, can prove it by its fruits. Meanwhile, if only these pages can afford some, be it ever so little, help towards the right training of our youth, I shall feel that my time and thought have been abundantly well spent. If otherwise, it will not, perhaps, be altogether useless to have set on foot a bona fide discussion of questions relating to a matter of such importance. At the worst, supposing the world to gain nothing from what I have said, those who love their kind will, I hope, give me credit for the intentions which led me to undertake this task, and will feel their hearts beat in unison with mine. I go on now to show briefly from what point of view I propose to treat the subject, so as to avoid too much repetition of what has been already well said by others, and to gather up the arguments into that unity wherein lies the test of their validity, and which is the pure and primal source of all science.
- 11. There may be many special rules in the expository method, nor are these unknown; but it appears to us that not only would each gain in clearness if all were referred to one, but that the careful observance of the method itself would be much facilitated by the use of one instead of many. By the faithful application of that one, we should also find without further trouble what we are seeking, i. e. the regular procedure of the mind in reasoning. For this reason, we propose to direct our inquiry to finding out the ruling principle whence is derived the whole method of exposition, an attempt which, we believe, has never yet

been made. This essay will thereby assume a scientific character; for in no subject can we arrive at scientific exactness and a true system, until its more special divisions have been classed under the more general, and the latter under the most general of all, whence all are derived as from the fountain-head. In this last alone is there rest for the human mind, which is never satisfied till it has reached this final link of the chain, the ultimate most simple and absolute reason.

Should we succeed in reaching this height, far from feeling weariness or fatigue, we shall find refreshment and delight in beholding the vast fields below us, which we shall survey at a glance in all their aggregate relations, their order, and the wonderful variety of their phenomena, and shall be able, without effort, to take in all their parts, and measure their relative value. In other words, the mind in possession of a comprehensive scientific principle can grasp the multitude of ever-new conclusions which flow from it, develop and arrange them in their due order, and, by bringing them into comparison, assign to each its place and value in relation to the rest. We will therefore at once take in hand this main inquiry, through which we shall arrive by degrees at all the other questions we have to deal with, deriving them with ease as corollaries from the first.

BOOK I.1

ON THE RULING PRINCIPLE OF METHOD.

12. "It is an old maxim in common use, that whosoever will rightly learn great things must not attempt to grapple with their whole extent at once, but must begin with their smaller and easier parts." 2

This rule of method laid down by Plato was declared by him to be, even in his time, as old and commonly accepted as it is self-evident. It would be a great mistake, however, to underrate a maxim because it has become trite. It is rather the habit of the best and profoundest minds to find the deepest wisdom in those truths which are the most common, which every one knows and repeats, which none can dispute, and none avoid seeing. But to do this we must look far below their common aspect to their inward depth and power, where lie the true foundations, the true reason, of whatever is accepted as scientific. As it is, how-

¹ This book was published by Prof. Dom. Berti in the form of an appendix to his work on Method Applied to Elementary Teaching (Turin, 1849) with the name of Prof. Tarditi. No moral blame can be attached on this account to Rosmini, Tarditi, or Berti. Rosmini wrote the book in 1839; Tarditi had read and copied it for his own use in 1845; and Berti, having found it among his papers after his death, published it as a thing worthy to see the light. The public, which received it with satisfaction, was entirely the gainer, though its usefulness was probably a good deal impaired by its detachment from the other parts, which in the present work illustrate and confirm it.—Francesco Paoli.

² Plato in the Dialogue entitled the Sophist: ὅσα δ'αὖ τῶν μεγάλων δεῖ διαπονεῖσθαι καλῶς, περὶ τῶν τοιούτων δέδοκται πᾶσι καὶ πάλαι, τὸ πρότερον ἐν σμικροῖς καὶ ῥάοσιν αὐτὰ δεῖν μελετᾶν, πρὶν ᾶν ἐν αὐτοῖς τοῖς μεγίστοις. (Page 218 C.)

ever, only the few, the exceptional minds, who thus know how to measure the importance of the trite maxims which guide the common sense of mankind, it happens that these primary truths, though perfectly well known, are seldom applied as the rule of thought and action, or are applied uncertainly and inefficiently. Having once been recognized. they are forthwith passed by, in the search for newer and more special rules, which are held to be more precious, precisely because they are less obvious and are valued in proportion to their unfamiliarity. This explains why, in spite of the many centuries during which it has been known that the true method of teaching proceeds from the lesser to the greater, from that which is easy to that which is difficult, from the known to the unknown by insensible gradations; vet to this day, in the full blaze of science, it is rare to find books intended for the instruction of the young, that faithfully follow this easy and natural order. It is equally rare to find teachers thus adapting their lessons to the minds of their pupils, and leading them, as it were by the hand, from the lower to the higher by a pleasant and gently inclined ascent, until they reach the lofty regions of rarer atmosphere and perpetual light. Both in the text-books recommended by those who direct education, and in the lessons given, there is the same want of true method. Authors and teachers, satisfied with knowing the excellent rule we have pointed out, and recognizing its indisputable truth, set it aside at the very moment when in the process of teaching they should keep it most carefully in view, and consult it in the construction of every sentence they write and speak, as an infallible oracle, however trite may be its utter-It is disdained by those who hold themselves far above the vulgar herd; and hence, in their ambitious pursuit of science, they are apt to let go of common sense; while the young, whom they should be guiding upwards.

either stay idling at the foot of the hill, or the nobler spirits among them, pressing forward unguided, fall exhausted and shattered on the cliffs by the way.

13. It is true that the application of a principle so sim-It requires much ple in itself is by no means simple. thought, and above all an inflexible purpose, to apply it to every, even the least, detail of teaching, so that not a sentence—nay, not even a word or sign—shall depart from this law of method; and it is among the ablest minds that have written for the young that we find most zeal in such persevering and ingenious application. But though, by their noble efforts to conform their teaching to their principle, they produce excellent results, and greatly advance their pupils, their art is lost for other writers and teachers, to whom they do not transmit the observations they have made, or the rules for its application which they have discovered by practice. It remains, therefore, still a desideratum, that some one should mark out the road which every teacher ought to follow in order to conform his lessons to the maxim quoted above from the Greek philosopher, and lead the tender minds of his pupils by easy and gentle gradations to the heights of knowledge. This is the work we propose to do, or, at least, attempt; and, as the shortest way to it, we shall begin by addressing ourselves to the following problem: -

What is the ruling principle of method? or, in other words, how shall we find the sure rule by which the teacher of youth shall know what things he must begin with, and what should follow, so that the child who hears him may be led on, by gradations always duly adapted to his powers, from what he knows to what he does not know and has yet to be taught?

CHAPTER I.

ON THE GRADATIONS WHICH MUST BE OBSERVED IN THE MENTAL OPERATIONS REQUIRED OF CHILDREN.

- 14. It is evident that, for this purpose, we must determine what is easy and what is difficult for children to understand, and that we require an accurate test of the various degrees of difficulty in the various parts of any subject of instruction. Here we have to take into account the differences in quality and power of different minds, which vary in nothing so much as in their more or less quickness of apprehension in passing from one idea to another. The slower minds are often left behind, not because the ideas themselves are beyond their capacity, but because they move slowly; and while they are still laboriously toiling over the first steps, the teacher, without waiting for them, passes on to the next and the next, so that they lose the connecting links, and are left like travellers on a long journey whose guide has hurried on out of their sight. Such minds are reckoned the weaker and inferior, but are so, really, only in so far as they are unable to follow the series of ideas with the average degree of quickness, and, having lost the thread of connection, they are brought to a stand for want of a bridge, as it were, from one idea to the other. Hence also the erroneous opinion that there are subjects beyond certain intellectual capacities, whereas, in truth, those capacities fail to reach them, not from any inability to attain them if time were given to take each necessary step in due succession. but only because the road has been hidden or broken up.
- 15. Everything, therefore, depends on determining what is the natural gradation of ideas; how the mind passes from one to another; which are those ideas that are connected

and stand, as it were, in immediate proximity; which follow next on these, and so on to the most remote.

It will be evident to all that we are now on the ground of idealogy, and that it is from that science we must seek the full and effectual solution of the proposed problem. I might begin by assuming that the reader is already acquainted with the principles of idealogy which I have already published, and to which this essay is an addition in the way of development and application. But, in order that those who do not possess this knowledge may be able to follow me, I will here and there point out the leading idealogical principles, and summarize what I have said in my previous works on the subject, wherever it may be useful to make the reasoning clear.

CHAPTER II.

- THE GRADATION OF MENTAL OPERATIONS DEPENDS ON THE GRADATION OF OBJECTS TO WHICH THE ATTENTION OF CHILDREN IS DIRECTED.
- 16. Let us then enter into the human mind, and see what is the invariable law of its progress, the natural scale of thought by which it ascends. The law must hold good for all intellects alike, because it is intrinsic to the human mind. The scale must be the same for all minds, great or small, without a single step being omitted by any, although some minds will go faster and some slower.
- 17. In order to help ourselves towards the discovery of this law, let us start from any one thought with which our minds are occupied, and, reducing it to its elementary components, let us trace the thoughts which must have preceded and those which must follow it. We shall thus ascertain the place it holds in the intellectual scale, which step stands immediately below and which next above it.

- 18. Whatever the thought we select for examination, it must have an object; but neither is the object the thought, nor the thought the object. What then is thought? It is the act by which the mind fixes its intellectual attention upon anything, say a flower, or carries it from one thing to another, - from the flower, a rose for instance, to its species or class: thinking of it as a noisette, or China or damask rose, or as belonging to a larger species or class, - that of roses in general, or to the still larger family of the Rosaceæ. What is the object of thought? It is the term of this act, the thing on which attention is fixed, -in the above case, first, a flower in general; then the noisette, China or damask rose; then roses in general; and then the family of rosaceous plants. Who would say that these objects, which may be so various, are the acts of the mind? It would be as absurd as to say that the objects which pass before the eyes are the acts of the eyes immovably looking at them. It is, therefore, certain that every thought is the result of two distinct factors, -i. e. the act of the mind that thinks (in which lies, properly speaking, the nature of thought), and the objects of which it thinks, and which are the given conditions of thought; for without objects the mind cannot think.
- 19. Now the act of the mind is always an act of the intellectual attention fixed on some object or another; but the objects may vary indefinitely. If, therefore, there is a fixed law whereby the mind passes from one object of its thought to another, that law must be found in the objects,—in the manner, that is, in which they present themselves successively to the mind.

CHAPTER III.

- ON THE NATURAL ORDER IN WHICH OBJECTS PRESENT THEM-SELVES TO THE HUMAN MIND, FIRST DISCERNED IN CLAS-SIFICATION.
- 20. Let us, then, inquire how objects present themselves to the mind, which come first and which follow, and this will lead us to the natural and necessary order of thought we are in search of.
- 21. If I see a yellow-white rose, I cannot classify it among the flowering plants, unless I have first distinguished flowering plants from all others. The thought, therefore, by which I classify the rose among flowering plants could not arise in my mind except on condition that I had first had another thought, — namely, that by which I separated, in my mind, flowers from all other forms of vege-If, moreover, I say to myself, This flower belongs to the family of the Rosaceæ, I prove that, besides having distinguished flowering plants from all other plants, I have also distinguished the Rosaceæ among flowering plants in This new thought, then, presupposes not one thought alone, but at least two, —the two distinguishing thoughts, by one of which I separate flowers from other forms of vegetation, and by the other the Rosaceæ from other flowers. Unless my mind had already held these two thoughts, it would be unable to arrive at the third, and could never pronounce the sentence, "This flower belongs to the family of the Rosaceæ."

But, if I go on to distinguish roses among the Rosaceæ, it is evident that I must previously have had three thoughts at least; since I could not distinguish roses among the Rosaceæ if I had not first distinguished the Rosaceæ from other flowering plants, and flowering from all other plants. By parity of reasoning, we shall find that I cannot affirm

to myself, "This is a China rose," unless I make one more distinction which supposes all the preceding ones; nor can I finally perceive that the rose I see belongs to the kind named by gardeners Adelaide of Como, unless I make two more distinctions in addition to those that went before.

22. Be it noted that I am speaking of distinct thought, and not of the mere acceptance of a name without knowledge of the thing named; for assuredly it is possible for me to know that the white object I see is called Adelaide of Como, without knowing that it is a China rose, or that it is a rose at all, or that it is one of the Rosaceæ, or a flower, or a plant. On the contrary, I cannot affirm, with clear understanding of what I am affirming, that this thing which delights my eyes is an Adelaide of Como, without knowing, first of all, that it is a flowering plant, of the family of the Rosaceæ, and properly a China rose, and, moreover, that kind among China roses to which gardeners have been pleased to give that name; for all this is signified by the words "Adelaide of Como" as designating the object.

CHAPTER IV.

CONTINUATION. — METHOD OF TEACHING CHILDREN THE CLAS-SIFICATION OF THINGS.

23. Now, let us bring a little child into the garden with the intention of teaching him all that we have mentioned above, and place him before the Adelaide rose. How shall I begin my lesson, supposing him to be of very tender age, and never to have been in a garden before, nor to have seen either plants or flowers?

There are three ways in which I can lead him to make all the distinctions above indicated:—

(1.) I can begin by telling him the name of the rose he sees, and then take him on from the individual to the

species or smaller class, next to the larger and yet larger classes, until I bring him to the knowledge of the genera of plants.

- (2.) I can take the contrary way, making him, that is, first distinguish the rose he sees as a plant, and then from the genus lead him to the species or larger class, and so down to the smaller classes, until finally I make him observe the individuality of that particular plant.
- (3.) Lastly, I can, without attending to any gradations or order, speak to the child of roses, of plants and the other classifications, just as they come, without thought, to my lips.
- 24. It is evident that this last method is the worst, or rather it is the negation of all method. The child would be constrained to jump in thought now from the smaller to the larger class, now from the larger to the smaller; while as yet he knows nothing of classes, and still less of the signs by which he could recognize the respective extent of the classes.
- 25. As regards the other two methods, let us compare them, first with the view simply to observe the different operations of the child's mind in following the lesson we are giving him, and secondly to find out which of the two methods and corresponding series of mental operations is the easier, the most convenient to him.
- 26. If I want to lead him from the individual to the general, I shall tell him first that the beautiful object he sees is called Adelaide of Como; then I shall tell him that it is a China rose, then that it is a rose, then one of the Rosaceæ, then that it is a flowering plant, and lastly a plant. If I want instead to lead him from the general to the individual, I shall begin by telling him that the individual object is a plant, then that it is a flowering plant, then one of the Rosaceæ, then a rose, then a China

rose, and at last that it is an Adelaide of Como. In passing through the first series of ideas the child's mind is compelled to fix its attention first on the differences of things and then on their resemblances; for the individual is individual only in virtue of its unlikeness to all others, and the individual of a special class is an individual of that class only in virtue of its unlikeness to the other special classes which make up the genus. From the differences he then passes to the resemblances, —first, to those common to the smaller number, then to those common to a larger number. For he cannot rise from the individual objects called Adelaide roses to the conception of the objects called China roses, unless he observes-1. That there are resemblances in several of these objects, so that all alike are named Adelaide roses; 2. That there are other resemblances belonging not only to these first objects, but to many others, which hence are named all together China roses. In order to rise to the conception of the rose in general, he must observe a third series of such resemblances common to a much larger number of objects, on which rests this third and wider classification. A fourth series of observation will be required to lead him to the conception of the Rosaceæ as distinguished from the preceding conception; a fifth, to take him on to that of flowering plants; and, finally, a sixth, in order that he may arrive at the wider conception, that to which we want to lead him, - the conception of plants in general.

27. In passing through the second series of ideas, which is the inversion of the first, the mind of the child is obliged to fix attention first on the resemblances instead of the differences of objects; and he has to consider the former as the limits of the latter, passing step by step from the wider range of resemblances to the narrower. Thus he learns, first, the widest range of resemblances which form the

genus, and then the differences which more and more restrict and break up the genus into narrower and narrower classes. Having recognized the widest resemblances which constitute the class of plants in general, he must next learn the limit of those resemblances,—namely, the differences which mark out flowering plants from all others; then, among those flowering plants, he must distinguish the differences that mark the class of Rosaceæ; then those which among the Rosaceæ mark the minor class of roses; then the differences between China and other roses; and, finally, the ultimate difference between the Adelaide of Como and all other China roses.

28. These, then, are the two series of operations through which the child must pass. Which of these will he find the easier to follow? Will it be less difficult for him to find out the differences than the resemblances of things? Is the mental operation, by which we discern that two or more things are alike, more simple or more complicated than that by which we discern that they are unlike? That is the question.

To find the answer, we must go on studying the two modes of operation in the child's mind, and ascertain, by an accurate analysis, which of the two is the more simple or complicated.

29. If I tell the child, whom I suppose to be at the earliest stage of mental development, that the beautiful object he sees is named Adelaide of Como, he will certainly be unable to affix to that name the meaning attached to it by gardeners, who express by it one of the latest and most restricted classes of the rose. To the child, therefore, this denomination can be only a proper name, arbitrarily affixed to that object; he simply associates the sensation caused by the sight of the object with the sensation caused by the sound that reaches his ears. But, when I go on with

my lesson and tell him in addition that there are many Adelaide roses, and show them to him in the garden, he is obliged to change the meaning he had first attributed to the word,—to go back on the act of the mind by which he took the name for the sign of the one individual he saw, and to substitute for it another by which he decides that Adelaide of Como is not a proper name, but a name common to many similar objects.

- 30. If I then show him another rose, named Sappho, it is probable that he will call it an Adelaide of Como, because, however different its color, its form is similar. I shall teach him to distinguish it by pointing out the bright-purple color of the one to which I give the name of Sappho, compared with the yellow-white of the former. I shall also teach him that the word Sappho does not designate a single object, but a class of similar objects, showing him many Sapphos in the garden, with the result as before, that, having first taken Sappho to be the name of an individual, he will correct this first impression, and accept it as the name of a class of things.
- 31. Moreover, before going further, he will have to correct a third erroneous impression. For, at first, before I had shown him the Sappho, he knew only the Adelaide, and thought there was no other class; so, that when he saw the Sappho he at once applied to it the name Adelaide. But afterwards, on hearing that its name was Sappho, not Adelaide, he perceived his mistake, and restricted the class Adelaide within limits which he had first overpassed.
- 32. We come now to the third step, and I shall try to make him understand that both Adelaides and Sapphos have a name common to both, i.e. China roses. In order to understand this, the child will have to perform several mental operations, which are these:—

First, he will have to recognize that the Adelaides and

Sapphos, which he had at the outset distinguished by such wholly different names, have certain features in common which make them susceptible of receiving a common name. This is as much as to say that he will have to correct and change for the fourth time the meaning he had mentally given to the two words Adelaide and Sappho. For, as before, seeing the Sappho, he believed that there was no other class than the Adelaides, and consequently placed in it the purple rose also; so, having learnt to give the latter a wholly different name, he separated entirely the Adelaide from the Sappho, without attending at all to what they might have in common. But now, when I teach him the common name of China roses, I make him reflect that the words Adelaide and Sappho are not used to signify those objects absolutely, but only to signify that in each by which it is distinguished from the other, and that there is another name, common to both, that of China roses, which is used to signify that in which they are alike.

33. I will now lead him on to know a yet wider class of these lovely objects than that of China roses,—i. e. the class of roses in general. For this purpose, I must, following the same course as before, make him recognize, as in the case of the two varieties of China roses, the Adelaide and Sappho, two other varieties, say the damask rose, that, for example, called by gardeners Admirable, with white petals edged with crimson, and the red variety they call Graciosa. From these two varieties I shall lead my pupil to the species damask rose. But throughout this process he will again (as when I brought him to know the China rose) receive facts, and then have to correct in turn four erroneoùs impressions; and to these will be added a fifth, namely, the following:—

When, after showing my little pupil the Admirable and the Graciosa. I ask him what name will be common to them

both, he will immediately answer, "China roses," because as yet he knows no other species, and believes the Adelaide and Sappho, Admirable and Graciosa, to be four varieties of the same class. I help him to correct this error by telling him that the two latter varieties are not China but damask roses, and by making him observe the peculiarities which distinguish the China from the damask rose.

Arrived at this stage, I can also make him observe that both the China and the damask sort are alike roses, thus raising his mind to the conception of a larger class, including the damask as well as China species.

34. But the infant mind of my little pupil could not attain to this larger conception without first correcting a new error regarding the meaning of the names China and damask roses, — names which, in the first instance, serve to indicate those two varieties as altogether different, and having nothing in common. He attends to their resemblances only when he is told that they have a common name, that of roses.¹

35. I now go on and show my pupil a white thorn in flower in the garden, and a medlar also in flower. He will at once take these flowers for roses; but I shall tell him he is mistaken, and that the flowers he sees are not roses, but belong to the Rosaceæ. Poor child! Once more he will have to reform the conception he had formed of roses, — that is, he must restrict the meaning he had given to the word "rose," and learn to understand that not all the flowers which resemble a rose are roses. Then, prompted by the word "Rosaceæ" which he hears from me, he will fix his attention on that which distinguishes the roses already known to him and the Rosaceæ I am now showing him. Thus, for the tenth time, he will have to correct a mental error: but he is still

¹ The child's mind is assisted at this stage by the names themselves, China rose and damask rose, in which there is the word "rose" common to both.

ignorant of the true meaning of the word Rosaceæ,—ignorant that it designates a larger class of things, in which roses are included; ignorant, therefore, that, while all roses are Rosaceæ, not all the Rosaceæ are roses.

- 36. I must therefore go back again, and, beginning with the individual white thorn he has seen, make him understand that that name indicates not only the individual before him, but a whole species divided into many varieties; and that he must, as before, make a fourfold correction in his mind as to the meaning of the word. Then I must go through the same process in connection with the flower of the medlar; first causing the child to fall into, and then helping him out of, five more mistakes. Finally, I must lead him to compare the flower of the thorn with that of the medlar, and, after making him perceive their differences, make him observe their resemblances and the resemblances which they have also with roses, so that he shall arrive at last at understanding that the thorn and the medlar and the rose are three classes of the Rosaceæ. But in passing through these successive steps he falls into and has to correct two more errors, one of which consists in taking the white thorn for a medlar or for a rose; the second, in taking the names "white thorn" and "medlar" as absolute, and not merely signifying objects in some respects unlike, but having besides a name Rosaceæ, common to roses, to thorns and to medlars, signifying some properties common to all. Only then does he begin to understand the meaning of the word "Rosaceæ."
- 37. Up to this point the child thus led on has fallen into at least twenty-two mental errors, which he has had as often to correct. Let us go on. I must now teach him to distinguish the Rosaceæ from other flowers. If I show him a lily or a jessamine and ask him what it is, he will probably answer that it is a Rosacea, for as yet he knows no wider

class. I must, therefore, tell him that the flower he is looking at is not a Rosacea, but a lily or jessamine. Having learnt this, he must restrict the meaning of the word "Rosaceæ," which before had signified to him the general class of all the objects he saw in the garden, and apply it only to a special class among them. Thus he commits and then corrects a mistake about the word "Rosaceæ," being the twenty-third.

38. But, if I want to make him understand that the words "lily" and "jessamine" do not indicate only the individuals I am showing him, but families, such as the Rosaceæ, divided again into classes and species, and the latter into varieties, I must take him by the same road, full of successive pitfalls out of which he has to extricate himself, as when I led him to understand the meaning of the Rosaceæ. Unless I do this, I cannot bring him to the clear conception of flowering plants, which is my object,—a wider conception than that of the families, species, and varieties of the flowers which I have hitherto shown him. Not to trouble the reader with tedious repetitions, I will suppose this process gone through, and will simply observe that, in the course of it, my pupil has repeated his previous twenty-two mistakes, at least, for each family I make him acquainted with; so that, summing up all the errors his mind passes through to arrive at the knowledge of the three families of the Rosaceæ, the lilies, and the jessamine, we shall find that they come to about sixty-seven.

39. When further I tell him that the Rosaceæ, the lilies, and the jessamine are all alike *flowers*, I correct three more errors his mind had fallen into in supposing in turn that the words "Rosaceæ," "lilies," "jessamine," signified the largest class or genera, while now he finds that they signify classes subordinate to the genus or class of *flowers*, which leads his mind to attend to the signs common to the three families known to him, which before he had not perceived.

- 40. My pupil having arrived at this degree of knowledge, I take him into the kitchen-garden and show him a fine peach-tree crimson with ripe peaches. If I ask him its name, he will tell me it is a flower, for he knows no other class under which he could place it. "No," I reply, "it is not a flower, but a fruit," and so oblige him to correct the meaning he attaches to words for the seventy-first time, by making him understand that the class of flowers does not include all he sees in the garden. And yet he is still far from understanding the meaning of fruit as used in ordinary parlance, since it is used to signify neither an individual nor a variety, nor a smaller or larger class, but a class sufficiently extensive to include under it other classes of varying extent. I must, therefore, make him understand that there are many kinds of fruit, such as those formed around a hard stone; others hanging in clusters, like grapes or berries; others like seeds; others that grow in ears, as wheat or Indian corn; others that are altogether pulpy, and so on: further, that the fruit he is looking at is a stonefruit, but that it is only one of many species called peach or cherry or olive, etc.; that this one is a peach, but that there are several sorts of peaches, such as the hard-fleshed and the soft-fleshed, etc.; and that the one in question is hard-fleshed, but that there are several other similar sorts. Now, to teach him all this in inverse order, -i. e. beginning with the individual peach he sees, and taking him from the particular sort of peach to peaches in general, then to stone-fruits, and then to fruits in general, it is evident that I must lead his mind to form seventy-one more erroneous conceptions in the first instance, which, afterwards, I shall have to make him, an equal number of times, change and rectify.
- 41. Finally, having thus brought him to know fruit as a large class of the objects he sees in the garden, distinct

from that other large class of flowers which he first learnt to know, I may take him on to the conception of plants in general, leading him to place under this new and larger classification both flowering and fruit-bearing plants as subordinate classes; and this he will do, on condition, however, of again correcting the meaning he had attached to the two words flowering plant and fruit-bearing plant, restricting them, from their first signification in his mind as complete and independent classes before he knew that of plants in general, to that of subordinate classes of the latter.

- 42. Such is the lengthy road by which the child arrives at some clear conception of the words plant and vegetable. Is this the right method? Is this the easiest and quickest road to knowledge? To answer this question, we must compare the method followed with the other and inverse one, that which leads from the general to the less general; but first, I must make two observations, to justify and explain what I have hitherto said.
- 43. The first is that, in the case I have supposed of the child taking the first class he learns to distinguish as the most extensive, and then finding out his mistake by learning that there are still wider classes of things, is not a fanciful one, but a fact which I have learnt from experiments made with children, whose intellectual development always begins with learning the two extremities of human knowledge,—i.e. the individual by perception, and then the most universal, the class, if so it may be called, of things, of existences. From this universal class of things in general they come down to the conception of smaller classes, although always inclined to make each as large as possible, and only gradually arriving at the smallest.¹

¹ See the observations I have made on a little girl, two years and a half old, in the "Rinnovamento della Filosofia," B. H. CXXXI.

- 44. My second observation is this, that all the errors, which I have shown the child's mind to pass through, have their principal source in the meaning he attaches to the words he hears; and, for this reason, that it is by the use of words that he classifies the objects he sees, the word being the sign associated in his mind with certain common properties which are the foundation of his classification.¹
- 45. Coming now to the comparison of the two methods, let us first bear in mind that it is a fact of experience admitted by philosophers, even of the most opposite schools, that the human being is more inclined to observe the resemblances of things than their differences; that he discovers the former before the latter; ² and that the child proceeds, from believing things to be alike, to observe later how far they are unlike. I have explained this indisputable fact in my writings on Idealogy.⁸
- 46. This being established, it follows that the method most in conformity with the nature of the human mind, and the spontaneous action of infant intelligence, is that which leads it by the way of resemblances and not of differences, which begins by calling the attention of the child, through the use of names to the more general resemblances of things, leading him later on to note the less general; in other words, bringing him by degrees to limit these more general resemblances by the differences he is made to perceive in things which yet have this general likeness.
 - 47. Now, the method which leads the child from the gen-
- ¹ These common properties, considered apart from each individual and as the ground of classification, are so many abstractions made by the mind in using words. We have elsewhere demonstrated that the mind would never arrive at making these abstractions but for the impulse given to it by language. See "New Essay on the Origin of Ideas, Nos. 514 sqq.
- "Young children flud relations of similarity in the most dissimilar things; all children are coachmen, their sticks are horses, the chairs coaches."—TAVERNA, Novelle Morali (Moral Tales), Preliminary Discourse.
- ³ See the two chapters XXXII. and XXXIII. of B. II. of the work entitled Rinnovamento della Filosofia in Italia (Revival of Philosophy in Italy).

eral to the particular is precisely that which draws his attention first to the widest resemblances, and afterwards to the differences as limits of these same resemblances; whereas the method which leads the child from the particular to the general does exactly the reverse, — i.~e. leads him to consider first the widest differences and afterwards the lesser differences, introducing the resemblances as limits to the differences.

48. Hence the former is manifestly the method which follows nature, and the latter that which opposes and contradicts it.

And, in fact, if I teach the child that all the individuals he sees in the garden are called plants, and he hears me repeat the name plant at every successive individual I point out to him, he will, with the greatest ease, arrive at that degree of classification; for it demands from him no attention to particular differences, but only that he should form in his mind the general image of one of the individuals shown to him. This he does by putting together in the rough, as it were, the appearances common to all plants, and, having this picture in his mind in broad outline, it only remains for him to correct and fill it in in various ways, which he does by successive degrees.

49. Hence, when I go on to show him the difference between the plants which are merely for pleasure and ornament, the flowers and the fruit-bearing plants, he has only to take up his mental sketch and to give it two more touches, if I may so express it, by which he brings out the type or conception of flowering plants on the one hand, and that of fruit-bearing plants on the other. In doing this he is not called upon to correct his first outline as erroneous, for it remains permanently true and useful to him as knowledge of plants in general. He has only to add to it the more finished designs of special flowering or fruit-bearing

plants. The same holds good for all the further classifications the child's mind forms by this method, down to the more special ones of rosaceous plants, and those of different kinds of fruit, and, among the Rosaceæ, those that bear China roses; and among the peaches, those that are hard-fleshed; and so on to the Adelaide of Como rose, and to special varieties of peaches, etc. Throughout this series of efforts, the child is continually forming more and more distinct conceptions without committing a single error regarding the extent of the class, or the meaning of the terms he has learnt to use. All the conceptions he has successively formed are accurate; and the work done need neither be altered nor undone, but is well graduated and put together and ready for future use.

50. It is evident, then, that the true and natural method, by which children should be taught the classification of things, is that which begins by showing and naming to them the most general class, and the various individuals belonging to it; and thence, little by little, goes on to smaller and smaller classes and to the individuals falling under them, until we reach the smallest of all, that which I have termed the full species.²

CHAPTER V.

CONTINUATION. — ORDER IN WHICH OBJECTS PRESENT THEM-SELVES TO THE HUMAN MIND IN THE LOCAL DISTRIBUTION OF THINGS.

51. We have now arrived at a knowledge of the steps by which the human mind proceeds in the classification of objects; but what we are seeking is something more uni-

"This nature so doth graduate itself
In numbers, that there never hath been speech
Nor mortal concept that can go so far."

¹ See Paradiso, canto xxix. vv. 130-132.

² It is of importance to bear in mind here what I have said in the "New Essay," Nos. 647 sqq., relating to species and genera.

versal than this. We want not only to know how the mind succeeds in classifying the objects of its knowledge, but the general law of its graduated action in every form of thought, so as to obtain from it a general rule to guide us in leading the child to knowledge.

52. What we have already said about classification prepares the way for us, however, to find the general order followed by the mind in other operations. There is no surer way to this than observation of its processes as regards the particular things about which it is active, and the reduction of them afterwards to a general formula. Let us then return again for a little while to the careful observation of what passes in the child's mind.

We have seen that the action of the mind in classification consists in finding the relations of resemblance and difference existing between things. Let us now examine how the infant mind discovers other relations; those, for example, of respective localities.

53. Our pupil, whom we will call Felix, has already been shown all the plants in the garden, and has been taught how to classify them according to the above method, so that he can distinguish each tree, each shrub, each herb, each flower, and give to them without difficulty their more or less general, or more or less specific, names.

But the garden where he has learned all this is illarranged; the families and genera of plants are all mixed up together. Felix would like to have his garden divided into three separate plots, — one for the ornamental plants, one for the fruit and vegetables, and one for the medicinal plants; and that in each division the sub-divisions, proper to the plants themselves, should be observed. Let us suppose that one day he mentions this wish to his teacher, and that the latter, pleased with his pupil's thought, should obtain as a reward from the father of the child a small piece

of ground where the latter can make a garden after his own devices.

- 54. What was the necessary condition of such a thought entering the child's mind as that of arranging a garden according to the classification of plants which he has learnt? Clearly that he should first have learnt the classification, just as the condition of his learning the classification was that he should first learn to know the individuals to be classified. Here we see that a certain thought is the necessary condition of another thought, which follows the first and cannot precede it. In the case we are considering, the thought of the individuals preceded that of the resemblances between them; the thought of the resemblances preceded that of classes; the thought of the classes preceded that of the local arrangement of the objects classified. This order in the objects of thought is necessary, and is followed by all minds alike, whatever their degree of intelligence.
- 55. How then could we teach a child the propriety of a certain local distribution of objects according to their classes, if we had not first taught him to know the classes themselves? These once known, the thought of their local distribution comes spontaneously into his mind, and he understands it as soon as it is proposed to him. Here we have the order of thought respecting the local distribution of objects, and at the same time a rule of method in teaching suggested by Nature herself, first, show the child the basis, the reason for a given distribution of objects, and he will immediately, with scarcely any assistance, understand the distribution. The thought of it will occur to him spontaneously; he will feel its propriety and see how it can be effected.
- 56. Again, let us suppose that Felix has set to work to make his garden after his own fashion, and arranged it

according to the classification of plants which he has learnt. When he has nearly finished it, he finds out that he has allotted too much space to the divisions of medicinal and flowering plants, and left too little for the fruit and vegetables, which brings him to the conclusion that the ground should be divided in more exact proportion to the number and size of the plants of each kind. This is a new reflection, a new cognition he has arrived at by experience.

- 57. Was it possible for him to arrive at it sooner? Certainly there would be no absurdity in supposing that, before transporting the plants into his garden, he had considered that he must divide the ground according to their number and size. But, even if he had taken all this into consideration before setting to work, and before he had learnt the necessity of it from experience, still it would remain true that the order in which the thoughts occurred to his mind was and must be the following:—
- (1) The reflection, as yet only general, that the plants must be placed in different plots of ground according to the classes to which they belong.
- (2) The reflection on the *mode* of distributing the plants properly according to their classes.
- 58. Here we find the law pointed out in the last chapter, i. e. that the mind first conceives the general and then the particular, first the thought blocked out, as it were, in the rough, then in definite outline, then finished and perfected; first the necessity for a division, then the form to be given to it.
- 59. As regards this mode or form, a multitude of reflections will be successively awakened in the child's mind by experience, which no foresight, however keen, could have supplied, teaching him now the necessity of so arranging the plants that the taller and more leafy shall not overshadow the smaller and slighter; now, that certain plants

require more shelter than others from cold or wind, from damp or drought; that certain others must be put into poor, others into rich, others into sandy soil; others again into stiff soil, or in woody or marshy situations. He further learns that plants have their seasons, so that his plots remain at times bare, and shorn of their beauty; and that, as he cannot have all the plants in every season, he had better replace spring by summer plants, and these by autumnal ones. Thus by slow degrees, and by the continual succession of new thoughts, he learns that the proper distribution of plants in his little garden is by no means such an easy thing as he imagined at first, but is, instead, a slowly acquired art, requiring a long apprenticeship of labor, experiment, and thought.

- 60. Who does not see that this progress in his mind is made by successive degrees; that his reflections follow a certain order, connecting each with each, the one being derived from the other, so that the latter could not exist unless the former had preceded it? It is true that the teacher, enriched by his own experience, can communicate what he knows to his pupil; but the teacher himself will, if he is wise, make himself the interpreter and disciple of Nature, and lead the child's mind to the knowledge of truth by the same gradual steps he would have to follow in gaining the knowledge for himself by the much longer road of experience.
- 61. Let us examine another progress made by the mind with regard to the local distribution of objects.

One fine morning, Felix, going as usual into his garden and finding it carpeted with lovely flowers of every kind, thinks he will gather some, and tie them up into a nosegay for his mother. From that time, he takes to her every morning his pretty gifts. He finds out for himself how to weave his flowers into garlands, and he soon perceives that some

forms and colors go better together than others. As he takes great delight in this way of arranging his flowers according to their qualities, he soon learns how to make graceful and beautiful nosegays and garlands.

62. It is easy to see that his mind follows in this progress a certain necessary course. For, in the first place, he could not reflect on the beauty of flowers unless the flowers were already known to him; second, he could not think of tying them up into a nosegay unless he already knew not only one, but many flowers; third, he could not think that they would give pleasure to his mother unless he had first thought of the beauty of the flowers, of his mother, and of giving her pleasure; fourth, he could not think of the beauty of wreaths of flowers, involving a more complicated operation, unless he had at first gone through the simple operation of tying them together in a nosegay; fifth, he could not think of arranging them so as to produce a more pleasing effect without having first observed that harmony of color and form produced such an effect; sixth, he could not arrive at producing the most beautiful arrangement without first making many trials, mixing and weaving them together in various ways.

CHAPTER VI.

ON THE NATURAL ORDER IN WHICH OBJECTS ARE PRESENTED
TO THE MIND IN ABSTRACT REASONING.

- 63. The attempt to make the mind proceed by any other course than that indicated above would do it violence, and, far from assisting its development, would oppose and retard it.
- 64. Another example will make clearer still the truth we want to establish, -i. e. that the human mind follows in its development a method prescribed by Nature, and that it must proceed by that method and no other; for, even, if the

inexperienced teacher should fancy he had succeeded in carrying on his pupil's mind by some road not natural to it, he would simply be misled by the fact that the child often undoes, by his own mental effort, the work presented to him by his teacher, and, as a rule, disentangles and rearranges for himself the confused mass of matter thrust into his memory, though at the cost of infinite trouble and annoyance. The labor thus imposed on children by teaching them things in the wrong order, which they have to set right for themselves before they can understand what is taught, not only makes their learning very slow, but also very arduous and wearisome, as being opposed to the natural laws of their intelligence.

65. Who is so ignorant of logic as not to know that a process of reasoning is a series of propositions expressing so many judgments, so many thoughts, so many cognitions, depending the one upon the other, as consequences from their principles? It follows that the mind cannot arrive at a given proposition without having first passed through all the preceding propositions of which it is the consequence.

Take any theorem of Euclid, and you will find that its demonstration is reached by constant reference to preceding theorems which contain within them, as it were, the theorem that has to be demonstrated. Could the mind comprehend the ultimate theorem if it jumped over all the antecedent ones? The impossibility of this is evident.

66. And here I would point out the reason why the method of mathematicians is accepted as the best. The excellence of this method consists solely in the right order in which the various propositions of which geometry consists are arranged; and why should not the same rigorous order be observed in education as in any other science, or rather ought it not to be so observed?

Let us now seek the reason why mathematicians all observe this rigorous method required by the nature of the understanding, while the followers of other sciences neglect it, and in so far depart from the true and natural procedure of the intellect.

67. In mathematics, the mind is constrained to deduce one thing from another, which would be impossible unless it began with the premises and deduced each proposition from the preceding one. Otherwise it would soon perceive that it was really doing nothing and understanding nothing, and would refuse to go on blindly groping in the dark. In other branches of knowledge, on the contrary, the mind fancies that it understands where it does not, and adopts the first proposition advanced, attaching to it some meaning of its own, and storing it away in the memory as an acquired fact; and so on with all others. It is deceived as to the fact both by memory and language, as we have seen in the case of the child taught the classification of plants by passing from the lower to the higher, and at each step believing that he had learnt the name denoting a class, to find that he had made a mistake which had to be corrected. He does correct it, it is true, but at what a cost of wasted time! Nor does the correction always follow so quickly. More often it happens that a man advanced in life finds accumulated in his memory, without order or connection, a number of propositions which he learnt in youth, and which, though devoid of any living meaning to him, are associated in his mind with words, to each of which he gives a certain value. If, by chance, his memory of them is revived, he begins to perceive their connection, and how the one explains the other, and thus to understand them, because he has himself arranged them in their natural order. He does this little by little as years go on, and this is the principal reason why intelligence and love of knowledge come only in later years. The method of

education hitherto pursued aims only at cramming the child's memory with an immense burden of unintelligible words. The poor little brain is every day stamped and written over with mysterious signs and figures, not one of which can be understood till the whole has been gone through, seeing that the proposition, which is the key to all the rest and to itself, comes last instead of first of all, as it should do. Nothing of this kind can happen in mathematics, which never teach a proposition without giving its reason and demonstrating it.

The teacher who should make it a rule to give his pupils in every case the demonstration of what he tells them would find himself obliged, like the mathematician, to follow a strict order in the arrangement of his matter, and to proceed by an equally rigorous method.

CHAPTER VII.

RECAPITULATION.

- 68. It is time that we should sum up what we have said about the natural order of mental processes and their objects.
- 69. We have noted three kinds of objects about which the mind is occupied, and three modes of its action in respect to them:—the classification of objects by their resemblances; their distribution in a certain local order; finally, abstract reasoning.
- 70. In the first of these modes we have seen that, if the mind does not proceed by its natural method, it indeed gains something, but at the cost of continual mistakes which it has continually to correct.
- 71. In the second, if the mind, limited as it is, be forced on against its natural method, it acquires something, but that something is confused and inaccurate; its ideas become

involved, and fail to attain any solid convictions as the basis of steady action.

- 72. Finally, in the third, the mind cannot depart wholly from its natural order of progress, and any attempt to force it would be useless; the result being simply that it would come altogether to a stand-still, and could learn nothing at all.
- 73. These are precisely the three principal evils which follow from teaching the young without observing the true method which preserves the progressive order of ideas, and of which we are seeking the principles: first, the mind is led into error; secondly, its ideas are dim and confused; thirdly, it is brought to a stand, and all but stupefied.

CHAPTER VIII.

NATURAL AND NECESSARY ORDER OF INTELLECTUAL ACTION.

- 74. Now, if we consider attentively in what consists the natural and necessary order of the mental objects noticed in the three cases above analyzed, we can without difficulty pronounce it to be the following:—
- 75. "A thought is that which becomes the matter, or provides the matter of another thought."

That is the law. It is evident that, if a thought becomes itself the matter, or provides the matter of another thought, this second thought cannot possibly arise until the first has arisen and provided the matter needed for it.

Hence the natural and necessary order of all human thoughts is made manifest.

76. The whole sum of thoughts which have or can occur to the human mind may be distributed and classified in divers orders, as follows:—

First order of thoughts: thoughts whose matter is not taken from antecedent thoughts.

SECOND ORDER OF THOUGHTS: thoughts which take their matter from thoughts of the first order, and from those only.

THIRD ORDER OF THOUGHTS: thoughts which take their matter from thoughts of the second order.

FOURTH ORDER OF THOUGHTS: thoughts that take their matter from thoughts of the third order.

Fifth order of thoughts, etc. Every other order may be successively enumerated, each being characterized by its matter being taken from the order immediately preceding it.

There is no end to this series of orders: hence the infinite development for which the human mind is organized towards a term it can never reach.

- 77. Now that this order followed by the human mind in every act of the intellect is a natural one is self-evident; for the nature of the mind is such that it can arrive at a cognition only when the matter, the object of it, has been antecedently given.
- 78. Reason itself shows that this order is necessary and immutable; since it is impossible for any mind to think or understand without a something, an object, to think of and understand.

CHAPTER IX.

RULING PRINCIPLE OF METHOD.

79. Having thus discovered the immutable order of human cognitions, we have reached at the same time the solid foundation on which we can construct the method of teaching. This method is natural and invariable as is the foundation on which it rests, -i. e. the law above explained which governs the human understanding. It is perfectly clear and definite, and it is the only method; for all the good methods hitherto invented can be reduced to it; they are but partial glimpses of it, or means of arriving at it, and all methods opposed to it are bad.

- 80. The formula, then, which expresses the method of teaching in general, and the ruling principle of Method, is the following:—
- "Present to the mind of the child (and this applies to man in general), first, the objects which belong to the first order of cognitions; then those which belong to the second order; then those which belong to the third, and so on successively," taking care never to lead the child to a cognition of the second order without having ascertained that his mind has grasped those of the first order relative to it, and the same with regard to cognitions of the third, fourth, and other higher orders.

¹ The word in the original is *intellezioni*, which seems to me better expressed by *cognitions* than by anglicizing the word into *intellections*, which would require an explanation, or paraphrasing it by *acts of the understanding*.

BOOK II.

ON THE APPLICATION TO LITTLE CHILDREN OF THE RULING PRINCIPLE OF METHOD.

SECTION I.

ON THE NECESSITY OF CLASSIFYING THE COGNITIONS OF THE HUMAN MIND ACCORDING TO THEIR ORDER.

- 81. From what has been hitherto said, we are led to the conclusion that the first step towards adopting the true method of nature in the teaching of the young, whether private or public, is to make an exact classification of all the cognitions of the human mind according to their respective natural orders, as laid down above. This has never yet been done nor even thought of, the necessity of it not having been perceived.
- 82. Nevertheless, it is precisely what the ablest educators have sought after, and have partially attained without themselves being conscious of it, and what experience has revealed in individual cases, without, however, its universal validity having been felt.¹

I shall exemplify it by instances taken from the simplest things, seeing that the principle we have laid down should

1 "On commence à sentir que pour assurer les progrès de l'education il faudrait découvrir la méthode psychologique, ou en d'autres termes, découvrir les lois du développement moral de l'individu. Mais sans prétendre connaître encore la nature intime de l'âme, ou peut s'attacher à suivre la marche des progrès intellectuels dès la naissance. Et comme la connaissance du monde physique et moral ne peut parvenir que successivement et dans un ordre determiné à un être plongé dans une entière ignorance, on s'aperçoit bientôt, que cet ordre décide du réveil des facultés diverses dans l'âme de l'enfant." — MAD. NECKER DE SAUSSURE, L'Education Progressive, Tom. I., Préface.

guide the teacher in every word he utters; and whenever he departs from it, were it only in a single sentence, he commits an error against right method.

83. The first author in Italy who wrote good readingbooks for little children wrote in detached sentences, mostly leaving out the conjunctions. I will give the reason for this omission in his own words: "What is first learnt is to discern things themselves, and next to distinguish their Not till later on do we group them together, and come to understand their unity and correlation. This second degree of knowledge is precisely that which is denoted by conjunctions, the office of which is to bind together the several members of a discourse, its sentences and periods. If, then, the children, having arrived at the first degree of knowledge, that of distinguishing things from one another, are satisfied with that, it follows that they will have neither the inclination nor the aptitude to learn the use of conjunctions, until, at least, their first eagerness is somewhat abated."

84. The man who wrote these words had arrived, by the guidance of experience in a particular case, at a partial perception of our principle. It is perfectly true that the little child applies himself to understand the meaning of each sentence, but pays no attention to the conjunctions which bind the sentences into a whole, so that they are lost to him at his tender age. But why does this happen? The answer is to be found in our principle: the relations between the different parts of a discourse belong to a higher order of thought than the simple sentences which compose

¹ Giuseppe Taverna, a priest of Piacenza, published his first Reading-Book for Children in Parma, 1808 Many editions were afterwards published with improvements by the author. The edition of 1817, and later ones, contain the letter of dedication to the I. R. Delegate of the Province of Brescia, Don Francesco Torriceni, from which we take the observation concerning the omission of conjunctions.

it, and therefore they cannot be comprehended by the minds of children, who have not yet mastered the cognitions expressed in the simple sentences. This becomes evident, if we reflect that the thought of a connection or relation between two things cannot arise until after the perception of each of the individual things separately. The thought, then, of individual things is that which provides the matter necessary to the thought of the relations of things, and must therefore be anterior to it.

85. But is there no other order of cognitions which precedes that of sentences in the child's mind? Yes, assuredly: there is that of simple conceptions expressed in single words. This was revealed by experience to Vitale Rosi, and therefore he began his excellent "Manual for Preparatory Schools," with exercises intended to teach children the names of things by explaining the meaning of one word at a time, as the sign of a thing, not as the element of a proposition.

86. The reason of the weariness of children, when we attempt to make them analyze propositions, is simply because they are required, in doing so, to accomplish two mental operations at once, — two operations which are in their nature successive, and cannot be contemporaneously One of these is the act of understanding by carried on. which the child arrives at the meaning of single words; the other is the act by which the child binds the words together so as to bring out of them the meaning of the proposition. Is it not manifest that the sense of the proposition as a whole cannot be reached by the human mind until it has gained the materials for it from more elementary ideas, those which contain the meaning of the individual words or The cognitions having for their object the cognitions?

¹ M. Vitale Rosi, Principal of the Seminary of Spello, published the Manual above quoted, in Fuliguo, 1832.

meaning of simple words, taken one at a time, must therefore be anterior in order to those which aim at the meaning of a whole proposition: this explains why the child cannot perform the latter until he has had time enough to compass the former.

87. The observation of Abbé Rosi is similar to that which had been made before by the Abbé Taverna. The latter had observed that children do not at first understand the value of the conjunctions which bind sentences together. The former observed, in addition, that children do not, at first, understand the value of the conjunctions which bind single words together so as to form a sentence. Both observations are only particular cases of one general principle.

SECTION II.

ON THE COGNITIONS OF THE FIRST ORDER AND THE CORRESPONDING STAGE OF EDUCATION.

CHAPTER I.

WHICH ARE THE COGNITIONS OF THE FIRST ORDER?

- 88. Although we have no intention in this treatise of classifying the cognitions of the human mind,—a task not to be accomplished either by one book or one man, but only by the labor of the centuries to come,—yet we must enter into it as far as is necessary for the understanding of our view, to make its importance manifest, and also to point out the way that must be taken to carry it into effect. For this purpose let us inquire what are the cognitions which belong to the first order.
- 89. The general force or energy by which the mind actually comes to know is called attention.
- 90. The object of instruction is to bring the young to know, and it may therefore be called the art of properly directing the attention of the youthful mind.
- 91. There are two principles of his future knowledge which in the mind of man precede even the awakening of attention,—the fundamental feeling and the intuition of being. The works on Ideology I have already published are mostly devoted to proving the existence of these original principles in man, and I shall not, therefore, dwell upon them now.
- ¹ See especially The New Essay on the Origin of Ideas (translated into English), Il Rinnovamento della Filosofia, and the Antropologia. I hope I may assume that all who have read those works with some attention will find it impossible to doubt that the two above-mentioned principles are essential constituents of the human being.

- 92. But the fundamental feeling and the intuition of being in the human mind do not suffice without attention.¹
- 93. Nor do these two congenital principles form the object of man's attention when it is first excited. It turns to the new stimuli, which, through pleasure or pain, violently alter the sentient condition of the mind. These stimuli are the accidental sensations.
- 94. The accidental sensations are real modifications of the fundamental sense, but are not cognitions; hence the intellectual development of man cannot begin with sensations alone.
- 95. When man is moved to apply his intellectual energy to that which he feels, then is the moment in which begins his development as an intelligent being. We must, therefore, diligently examine the nature of this first application of intellectual energy to sensation, so as to determine rightly the first stage or order of human cognitions.
- ¹ In the intuition of being there is intellectual activity; but this activity, which is essential to the intelligent mind, is not that which we call attention. Attention is not a primary but a secondary act; it is not essential, but accidental and adventitious,—the act by which the mind concentrates and fixes its intellectual energy on a simple or complex object to the exclusion of every other. The intellectual energy is born of that primary activity which has already sprung from the intuition of being. We think it useless to repeat that there cannot be, properly speaking, a sensitive attention; and therefore by "attention" we always mean a power belonging to the intellect.—See New Essay, No. 73, 74, 78, and foll.

Note of the Translator. - For the general English reader, it may be useful to give some explanation of the terms fundamental feeling and intuition of being, and of the author's use of them. The fundamental feeling is that generally diffused feeling of our own bodies which constitutes us sentient beings. Rosmini shows how from this feeling we gain an assurance of the existence of our own bodies, and through them of external bodies, as certain as the fact of consciousness (New Essay, Nos. 701 and foll.). The intuition of being is the innate assurance that something is. He also shows that all our concepts and ideas are judgments by which we affirm that so and so is so and so; and, as in every judgment there must be a subject and a predicate, unless we had the first indispensable predicate - something is - given to us in the constitution of the mind, and with it the notion of being, entity in general, it would be impossible for us to pronounce any of those judgments by which we affirm the existence of any particular entity. From these two principles, as "essential constituents of the human being," Rosmini derives all our knowledge. They are the corner-stones of his philosophy. - M. G. G.

96. This examination divides itself into three questions: First, what is the stimulus which primarily excites the intellectual attention of the human being? secondly, what is the object of his primary cognitions? thirdly and lastly, what is the nature of these primary cognitions?

ARTICLE I.

WHAT IS THE STIMULUS WHICH PRIMARILY EXCITES THE INTELLECTUAL ATTENTION OF MAN?

- 97. With regard to the first question, it seems probable to me that not all the accidental sensations have power to excite the attention of man; that those which occur continually through the healthy functions of life have no such power, nor perhaps the many pleasurable sensations which so entirely satisfy the infant's nature that it wants nothing beyond.
- 98. It seems, then, that the sensations which primarily excite human activity are those which bring a feeling of want, and which in consequence set in motion first instincts, and then spontaneous action. Thus the intellectual activity does not move gratuitously, but only when man feels the need of it: he calls it to his assistance, as he calls on his other powers when he wants to remove an annoyance, or to satisfy a desire.

ARTICLE II.

WHAT IS THE OBJECT OF THE PRIMARY COGNITIONS?

- 99. With regard to the second question, the objects of intellectual attention must certainly be the *objects* of the wants which aroused it. But, not to confuse the order of sensation with that of intelligence, we must distinguish
- $^{\rm 1}$ I have shown in my ${\it Anthropology}$ how sensations stir up instincts and all spontaneous action.

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what proceeds from mere animal instinct, and then add to it what proceeds from intelligence. The animal instinct is always stirred by a group of sensations. That group of sensations sets in motion the animal; the animal activity thus excited seeks another group of sensations, which is the term of the animal want. This second group of sensations partly completes the first group and partly extinguishes it, and in any case satisfies the want. Here we have as yet no objects, but only associated sensations: it is always a sensation acting in accordance with its own laws.1 intellectual activity comes to the aid of the man, who, as an animal, wants that group of sensations. That activity cannot be explained by volitions except on condition that it first perceives and knows, because the will is a motion The intelligence then of the mind towards a known object. must first perceive; then the man acts, — that is, he wills after having perceived.

ARTICLE III.

WHAT ARE PERCEPTIONS?

But what is this process of perception? By it the mind, the subject, places before itself certain objects. What are these objects? Are they also groups of sensations? Here we come to our third question: What must be the nature of the primary acts of the intellect or cognitions?

104. After what has been said, it will probably occur to us that the animal want which induces us to act, having for its scope and term a certain group of sensations, this group of sensations, and nothing more, will be the term of perception. And at the first glance there is nothing repugnant in this. But, if we consider that when we speak of that group of sensations from our present position of advanced

¹ See on the whole of this question the Antropologia, n. 426, following 484-486.

intellectual development it has ceased to be an assemblage of sensations merely, but has become an assemblage of sensations perceived and understood by our intellect, we shall discover our mistake. For sensations alone, unaccompanied by any ideal element, cannot, in their naked realism, become objects of the mind which has not yet contemplated them. How, then, does the mind come to contemplate and have the intuition of them?

Simply by making them objects to itself which they were not before. But what do we mean by an object? What is the notion common to all the objects of the mind? It is this,—that they are all entities, and the term "object" means, in fact, only an entity. The mind, in perceiving sensations, transforms them into so many entities, that being the proper nature of the intellectual operation. The word "object" is used in reference to this operation, and the word "entity" signifies object in its most general sense. It follows that, apart from a mind, this (ideal) entity has no being, and that the mind can perceive and contemplate only entities.

102. But, if sensations are not entities, how can they be perceived?

Sensations are not themselves entities, but they are certain modes of action of entities. In analyzing sensation, we find that it contains two elements,—the subjective and extra-subjective. Considered in its subjective element, the entity to which the sensation belongs is the subject: sensations are the passive actions of that entity. Considered in their extra-subjective element, the entity to which they belong is different from the subject (extra-subjective), and they are the active actions of that entity. The intellect, then, which perceives only entities, can perceive sensations only in the entities to which they belong. But they belong to two entities,—the subject and the extra-subjective body

Now, which of these two entities is the object of the primary cognitions?

103. I was for a long time in doubt how to solve this question; but I have finally arrived at the conclusion that man, in his primary cognitions, perceives his adventitious sensations as belonging to extra-subjective entities,—that is, to external bodies. I was led to this conclusion by the following train of reasoning:—

We have seen that attention is that power of the mind which directs the intellect to one object rather than another: attention itself, again, being directed by sensible wants. Now the wants of the human being in the first moments of existence relate entirely to external things, from which alone he tries to obtain the pleasurable sensations which he desires and needs. He does not, therefore, direct his intellectual activity to sensation as a passive property of his own being. but as an active property of external objects, towards which he stretches forth, as it were, to seize from it ever new and keener sensations. The sensation, in so far as it is passive, is already complete, and he needs neither intelligence nor will to enjoy it; but sensation, as an action coming from external bodies to his, is that which presents itself to him, which he imagines and seeks before having felt it, if only he has some indication of it, and is impelled towards it by the laws of his instinct and spontaneous activity. then, all the other powers of man tend towards the external objects which cause him pleasurable sensations, — as the infant, for instance, tends towards his mother's breast, -so also his intellectual activity must move in the same direction. and the first intellectual act of man must be the perception of external bodies.

ARTICLE IV.

OF WHAT IMPROVEMENT THE HUMAN PERCEPTIONS ARE CAPABLE.

- 104. There are degrees, however, in the perception of external bodies: it is an accomplishment which the child does not master at once. It is true that perception, as perception, is a simple act of the mind, performed instantaneously, the essential part of it being the act by which the mind places a something different from itself, and properly an object, before itself, and by this act becomes conscious that something exists. There is perception, then, so soon as the mind has affirmed this to itself.
- 105. Nevertheless that inward affirmation, by which man recognizes an entity, admits many differing modes and varieties, not indeed in itself in so far as it is a subjective act of the mind, but as regards its object, which may vary, the mind being able to affirm diverse existing things, entities or rather diverse modes of existence or entity.
- 106. These entities, which become the objects of the inward affirmations of the mind, admit of variation for two reasons,—
- (1) Because, although the entities are presented by sensation to the intelligence, yet the latter does not direct its attention fully to them for want of sufficient stimulus, and thus does not affirm them in all their particularities and qualities, but only in a more or less perfect, a more or less definite, degree.
- (2) Because sensation itself, owing to the limitations of the special senses and organs, does not present¹ them to the mind at once, with all their particularities and qualities, but only partially and successively.

¹ That sense is, so to speak, the stage on which objects are presented to the intelligence as spectator, has already been argued by us in the *Opuscoti filosofici*, Vol. I. Cf. *Teodicea*, Nos. 55-60; 88-90; 153.

107. Hence it is that perception goes on continually perfecting itself in two ways, i.e. 1. In proportion as the stimuli applied to the intelligent mind compel it to fix its attention on whatever is most definite in the objects presented by sense. 2. In proportion as sense itself presents various aspects of the entity, in other words, more of its properties and activities.

108. Let us say a few words on both these forms of gradual improvement in *perceptions*; for, unless we attend to their capacity for improvement, we cannot arrive at knowing what passes in the mind of the child from the first moments of existence up to the freest exercise of reflection.

Let us begin by considering the first mode in which the intellectual perceptions are improved; and, first of all, let us ask what is the condition of utmost imperfection in which we find them. When we know this lowest point, we shall be able to measure from it the degrees of perfection gradually attained by the child.

109. The first and most imperfect affirmation inwardly pronounced by the child is that which, if formulated by us in words as yet unknown to him, would be expressed thus: "I feel, I have the sense of, an *entity*."

In this sentence, he determines none of the qualities of the entity felt by him, but only its relation to the actual felt sensation, which is that of agent. Entity and agent are identical in this first affirmation, this first perception; but the mode of the action, which determines the action, remains in the sensation only, without becoming the object of the intellectual attention. The latter is satisfied with a cognition that is almost wholly negative; for up to this time it is scarcely more than ideally-negative, as it contains only the affirmation of an agent, without expressing any

other determination beyond the relation to what is felt by the subject.¹

And this is precisely that wonderful link between sensation and intellect, which many find it so supremely difficult to understand that they reject our philosophy because they cannot overcome the difficulty. We would urge them to long and deep meditation on the unity and identity of the sensitive and intelligent subject, which, once understood, all difficulty disappears. For he who has arrived at seeing that identity, sees also, at once, how the subject (the human mind) can find in sensation the determination of the entity which it sees and affirms through the intellect. But we have spoken of these things elsewhere, and must not repeat ourselves too often.

110. That which the intellect perceives in its first and most imperfect perception of an object is, then, the action which an entity different from the subject has performed on the subject, but nothing more. It does not think of the mode of such action, as it takes place in sensation; and this mode, remaining outside the intellectual attention, all the special qualities and properties of the object remain also outside its cognition. The subject knows only that there is an entity which acts, but it feels and does not know how it acts.

Later on, indeed, the subject (man), impelled by his wants, fixes his attention not only on the agent, but on the mode also of its action, and it is then that his perception of the entity becomes more perfect by becoming gradually more positive. In fact, it is by observation of the manner in which an entity acts upon us, and of the effects which it produces in us, that we find out its properties and qualities and all its conditions. This is precisely the gradual work

¹ The reader must remember that I make negative or ideally-negative cognition of a thing to consist in two elements, —1. An entity in general; 2. A determination of it, consisting in a simple relation. — See New Essay, No. 1234 and foll.

performed by the mind; and here begins the art of observation, which, issuing from the infant's cradle, becomes a giant in the mind of a Galileo, and each day reveals to man new secrets of nature.

We have here traced the first growth of perception, which increases and becomes more perfect in proportion as the intellectual attention is directed to every part of the sensations, and conveys them, as it were, one by one, from the sense to the understanding. I mean that the mind perceives them one after another, by its intelligence, and distinctly affirms them by its inward judgment.

111. But the intellectual attention cannot go beyond this to observe what is not brought before it by sensation. This is another of its limitations; this is the second line of progress assigned to perception. Its field is ever increasing with the increase in the number of sensations presented to it by the matter or term of its operation.

The object perceived by the infant for the first time varies to his perception as it comes before him again and again, — that is, the child, although he always perceives that object as acting on him and producing a sensation, does not perceive it as acting in the same manner or in the same degree, nor as producing only the sensation first felt, but others also, one after the other. At first, then, he perceives a simple force, which produces in him a given sensation, — the touch of a hand, for example. But afterwards he suffers a number of sensations, which reveal to him so many actions coming from agents other than himself; and at last he discovers (through the identity of space) that all the sensations come to him from a single agent, or one he believès

¹ In the Origin of Ideas (Nos. 941 and foll.) it is shown how the reference of several perceptions to one object as their cause results in the mind in virtue of the identity of the space to which there various sensations are referred. It was his partial glimpse of this truth which led Descartes to believe that he had found in space the actual essence of body.

to be single,—that is, from a body. Thus at first, in the sensations of touch, smell, hearing, and taste, he will perceive so many different forces, and therefore entities; but he will very soon arrive, by greater attention, at the belief that all these entities are only one body, from which proceed this variety of effects upon him, and thus he will improve his perception of that body.

- 112. By degrees his mind will take another step, and will harmonize sight with touch. At first, he will perceive by sight one single object, one single force; so that all the objects before his eyes are seen as one, and form a variously-colored surface. But very soon he will learn, by the joint exercise of touch and sight, to read the various colors presented to his mind as signs of distinct things, not superficial only, but solid; and thus through the eye, by means of a judgment, he comes to the perception of external bodies.
- 113. Hence the perceptions of external bodies, which constitute the first order of cognitions, are arrived at through the following mental processes:—
- 1. The mind becomes conscious with each sensation of the existence of an agent, the object of the spirit, in which resides the essence of intellectual perception.
- 2. The mind unites various sensations, received from the four senses, touch, smell, taste, and hearing, each of which separately had made it conscious of the existence of an agent, so that it now attributes them to a single agent, the common origin of all: thus it perceives body, i. e. forms the general idea of body.
- 3. The mind distinguishes in the single sensation of sight the different colors which it learns to recognize as signs of those same bodies perceived by touch, and to which it has already learnt to refer many sensations of the various senses.

These are distinct operations of the mind, but their effect

is always intellectual perception; and therefore they do not constitute various orders of cognition, but one only, the first: it is always perception itself that the mind, in all these operations, repeats and improves.¹

ARTICLE V.

- TO THE FIRST ORDER OF COGNITIONS, BESIDES PERCEPTIONS, BELONG ALSO THE MEMORY OF PERCEPTIONS; THE IMPERFECT-SPECIFIC IDEAS; AND THE ASSOCIATIONS OF THE THREE SPECIES ENUMERATED, TOGETHER WITH THE WHOLE ACTION AWAKENED BY THEM IN THE MIND.
- 114. The mind performs several other operations without going beyond the first order of intellectual acts or cognitions. In fact, the imaginative memory, which retains and reproduces past sensations, cannot be said to belong to another order of cognitions; for it changes neither the object nor its term nor the matter of the operation, but only the faculty whereby the mind operates upon that matter. Therefore the perception which I remember and reproduce is always the same as regards knowledge. I know by that operation only the very same mental object and no other.
- 115. In the same manner the association of several perceptions, or imaginative memories of perception, does not go beyond the first order of cognitions when it consists only of a simple association of coexistences in the mind, without any analysis or synthesis of the perceptions by the understanding.
- 116. In the third place, the instincts, and in general the whole spontaneous activity set in motion by perceptions, and by the memory and imaginary reproduction of them, are operations which do not exceed the limits of the first order of cognitions, of the first stage of human intelligence.
- ¹ Hence we see that, although there is a progress of the mind from one order of cognitions to the other, and it is this which marks the steps of our advance, there is also another progress made by the mind within the same order of cognitions, a progress which goes on through life, and never ceases.

117. In the fourth place, the full-specific but imperfect ideas belong to the same stage.¹

We mean by "full-specific" ideas, the things themselves which we perceive, considered merely as possible, without adding the thought of their real existence.

118. If I perceive a pomegranate, I retain the memory of my perception. The memory of the pomegranate, which yesterday I saw, touched, tasted, intellectually perceived, is more than the simple idea of it. For the object of my thought is not simply the image of that pomegranate considered as a type, a possibility of pomegranates, but it is that image referred to the pomegranate of yesterday; it is the image of that particular pomegranate, and I, in remembering it, do not think solely of the image, but of the actual But, if I should entirely forget the pomegranate of vesterday, and yet should in fancy contemplate the image of a pomegranate, which image I have retained from my previous perception, though I do not now refer it to the perception which I suppose myself to have utterly forgotten. in that case the image contemplated by my understanding represents to me only a possible pomegranate, not this or that one, or any real pomegranate. The object of my thought in this case is an idea which I term the full-specific imperfect idea.

119. I call this idea specific because it is not attached to any real individual, but is the type of infinite possible individuals: it determines, therefore, a class or species of individuals.

I call it fully-specific because I am supposing that it preserves all the qualities, even the accidental ones, of the pomegranate previously perceived by me, so that it is not an abstract idea, but one which represents individuals invested with all their peculiarities.

¹ It is necessary to consider attentively the difference between the three modes of the specific idea of which we have spoken in the Origin of Ideas, Nos. 648-50.

Finally, I call that full-specific idea imperfect because that type does not represent to me the perfect pomegranate, but a pomegranate such as the one I perceived, with all the defects and imperfections which may belong to it.

120. The action of the understanding, in passing from perception to the full-specific imperfect idea, is that which is called generalization.

This passage is exceedingly easy, because, the perceptive acts of the mind being transitory, as soon as the object is withdrawn from the external sense, perception ceases. though it has ceased, it leaves behind it two traces or effects, — the image of the thing perceived, which may be suggested by our fancy, or recalled by our will or by some external accident; and the memory of the past perception. effects differ in themselves; and, although so long as they coexist in the mind they may easily be taken the one for the other, yet, when the memory ceases and the image remains, or when the image fades away, the memory remains, or when one or the other becomes faint, they are found to be Still more do they become separate distinct in the mind. and distinct when the child receives other perceptions from the same thing; for then the image is the same, while, on the contrary, each perception brings a distinctly different remembrance.

Again, if the child receives perceptions from other things almost exactly similar to the first,—as for instance of several oranges, which could not be distinguished from each other except by minute differences to which the child at first pays no attention,—his memories multiply, while the image remains one and is common to all the objects. Hence it easily happens that the image in the mind stands out distinctly from the memory of past perceptions, and in this separate condition the mind quickly finds the basis of the full-specific imperfect idea of which we have spoken.

because it sees at once and naturally, in the image it possesses, the image of a thing which does not exist but is possible.

CHAPTER II.

ON THE ACTIVITIES WHICH RESPOND TO THE FIRST ORDER OF COGNITIONS.

ARTICLE I.

DISTINCTION BETWEEN THE TWO FIRST PERIODS OF CHILDHOOD.

121. In summing up what has been previously said, we find that to cognitions of the first order belong perceptions; the memory of perceptions (images taken alone are not cognitions, but internal sensations); the specific-imperfect ideas based on the image; the various associations of perceptions, memories, and specific-imperfect ideas; and, finally, the instincts and voluntary operations which follow upon this first stage of intellectual development.

122. When does this intellectual development begin in the infant? There is probably not a moment of its life in which it has not accidental sensations, at least internal ones, — sensations which began in the mother's womb. Does intellectual activity accompany every sensation from the very first?

I incline to believe the negative. I have already said that the simple sensations do not arouse the activity of the understanding; the sensation, which ends with itself, pacifies rather than excites to new activity. Those alone which give rise to a feeling of want, the want of new sensations, excite the intellectual attention.

123. It is true that these physical wants which excite the intellectual activity of the infant must arise very early, and with them come restlessness and the attempt to satisfy them,

I say "at least internal," because I suppose the fœtus to be in a state of sleep, as I have said in the Anthropology (No. 359). Usually the infant does not open, its eyes until eight days after its birth.

which will also last some time before they succeed in rousing intelligence to their aid. I conjecture, therefore, that the moment in which intelligence awakens to activity is marked by the infant's first smile.¹

By this ineffable expression of its joy, the infant seems to hail the light of the day which is dawning upon him. His reasonable soul rejoices in the truth which it recovers, and springs forward, as it were, to clasp it. How great, how solemn a moment to the human soul, must be the first act of its intelligence, the sense of a new and boundless life. the discovery of its own immortality! Is it possible that an event so stupendous and so startling to the infant, though the adult can form no idea of it, should not be manifested externally by signs of exuberant joy? You are right, then, O mothers, who watch so eagerly for your infant's first smile, who try to induce it, who welcome it with such trembling joy in every fibre of your being. You alone are the true interpreters of those first utterances of infancy which, in the shape of a smile, break from the lips and the eyes and the whole countenance of the little intelligent being; you alone understand its mystery; you understand that from that hour he knows you and speaks to you; and you, the first object of human intelligence, you alone know how to answer this language of love, and to make yourselves the

¹ The first period, in which the child has only a sensitive activity, would thus last about six weeks, as the infant scarcely smiles or sheds tears before it is six weeks old. The first week of its existence would be spent, under the influence of the external air and of the stimuli which surround and press upon it on all sides, in the passage from the dormant state, during which sensation is wholly internal and wrapped up in self, into that of complete wakefulness, in which it becomes conscious of the world without, and develops its sensitive activity through communication with the corporeal objects that are as yet strange to it. This it does, setting in motion the alternate action of the nervous system, which will continue throughout life (see *Anthropology*, Nos. 355-365). When this great operation, which requires the whole effective activity of the new-born child, is completed, and the important nervous action properly regulated (which will take about six weeks), the child has the necessary leisure for the next great operation, the setting in motion of the intellectual faculties.

image and type of the truth which is intelligible, and which shines by its own light.¹

- 124. If we admit this conjecture, it follows that, from the earliest infancy, there are two well-defined periods to be distinguished,—
- 1. The period of merely sensitive development, which begins with existence itself.
- 2. The period of the first stage of intellectual development, which begins with the child's first smile.

ARTICLE II.

ACTIVITY PROPER TO THE FIRST PERIOD.

- 125. During the first period, the child has only feelings and animal wants, and its activity is solely animal.²
- ¹ The smile of the infant is looked upon by mothers as a sign of intelligence. Here are a mother's words upon it: "At this backward stage of intelligence, it (the infant) is interested by the human face. While nothing material yet attracts it, it is awakened to sympathy; a cheerful countenance, a caressing tone, will win it to a smile; the little creature is evidently animated by happy feelings; we, who know their expression, recognize them in him with delight. In this fact there is nothing that belongs to the senses. The person who stands beside his cradle is sometimes not even his nurse, and has perhaps disturbed him, and subjected him to tiresome manipulation. Never mind; she has smiled at him, and he has felt himself loved, and loves in return. It would seem as if that new soul had the intuition of another and said to it: 'I know thee.'" (Mad. Necker de Saussure. De l'Education Progressive, s. ii. c. ii.) I have already expressed elsewhere my suspicion that, in the intercourse between two human beings, there occurs, besides material impressions and animal sensations, a recondite communication between their minds, of which, however, the medium is sensation. In the smile of the infant something of this kind seems to take place. In this case, the infant intelligence seems to receive its first impulse through this mysterious communication. Incipe, parve puer, risu cognoscere matrem. — (Virgil, Ecl., iv. 50.)
- 2 By "activity" I mean a real stirring of the child's faculties. Now, in order that they should be stirred, not only must the child have sensations, but these sensations must produce a want of other sensations, and thus generate the instinctive actions. If we remember this, we shall not wonder that the intuition of being, innate in man, fails to produce in him of itself any activity. This intuition is a completed act of the subject man; and, when an act is completed, the subject rests in it. It is necessary, therefore, that the subject should feel impelled to an act not yet performed, in order to arouse him into motion, that is, to the action by which he carries out and completes the act. See, as regards the manner in which several feelings blend into one, and produce that state of restlessness which I have denominated affection, from which springs the instinct that moves as, Anthropology, No. 485.

This activity is in part congenital in the animal, and I have given it the name of *vital instinct* in the work I have entitled "Anthropology," to which I must refer the reader who may wish to inquire further into this matter.

There also he will see how from the vital instinct arises the *sensual instinct*, another branch of the animal activity of which we are speaking.

126. It would be difficult to define whether the first workings of sensual instinct begin in the mother's womb, or as soon as the animal comes in contact with the atmosphere, or some time later.¹

It seems likely, however, that the first impulse given to the exercise of the sensual instinct is the want of food.²

Respiration, the internal and slow combustion which begins in him the moment he sees the light, consumes the oxygen and carbon necessary to his blood, and thence the want excited in him to repair their loss by food. The want of food is excited in the same manner by the losses his body sustains through perspiration and other secretions. The motion of the lips by which he clings to the mother's breast is, therefore, one of the first acts of the sensual instinct.³

The sensual instinct, then, is first stirred to action by pain rather than by pleasure, using the word "pain" to mean any kind of discomfort, any kind of troublesome want.

127. The troublesome wants always remain, even later on, the most efficacious stimuli to the activity of the sensual instinct, but this instinct very soon passes from its primitive state. It is modified by the experiments it makes; for, as I

¹ See on this question the New Essay, No. 1294.

² Respiration belongs to the vital instinct.

³ The child begins very early to put out his mouth towards external objects, and when he can use his hands he carries everything to his mouth; from which it would seem that he is impelled to use his mouth, and that his gums and lips are his first organs of touch.

have already observed,1 the activity of any human faculty produces, besides the momentary action, a permanent effect on the man, a new state and condition, especially in the faculty exercised. The sensual instinct, then, which on its first awakening is stirred only by pain, soon comes to be drawn out by pleasure also, and pleasure becomes a want Thus, when the child, through the satisfaction of his most troublesome wants, has procured for himself sensations which he has found to be pleasurable (for kind Nature has added pleasure to the satisfaction of our wants), he has two motives in seeking sensations, — to avoid pain and to enjoy pleasure. From these two sources springs the craving for sensations, which henceforth accompanies man through life, and which becomes so various, so powerful, and also so capricious and ill-regulated.

128. I have already hinted that I more than suspect a communication between human souls through sensation. This would be a fact worth verifying by the most careful observation. Let me add, always in the way of conjecture, that I am inclined to believe that not only does the subject (man) receive, together with the sensation produced in him by a person, a feeling which is the immediate effect of the intelligent soul acting through the sensations excited, but that a similar communication takes place in purely sensitive beings. I find it difficult to believe that the kitten, when it plays with a ball of paper, or a straw tied to the end of a string, is only seeking to vary its material sensations: it seems to me rather that it is instinctively seeking in its play something animated, something which lives and moves of itself, and that it ceases to play as it grows older because it knows better, and has learnt to distinguish between what is and is not alive. Mad. Necker makes at somewhat subtle observation about children in relation to

¹ See La Societa e il suo fine ("Society and its End"), L. IV. c. vi.

that not till much later does he come to be fully persuaded of that great marvel, the existence of inanimate things.¹

As the animastic sensations by their nature produce in the child physical affection and from that sympathy, so the animastic perceptions produce benevolence, good-will, which is already an incipient habitual and affective volition. In fact, benevolence, which is a rational affection, cannot be conceived unless we suppose a living being towards whom it is exercised; for what is inanimate, if we conceive it really as such, and do not associate our conception of it imaginatively with some element of life, may indeed be precious to us for its utility, but we cannot love it, or feel towards it that affection termed benevolence.

134. Now the child, in the fulness of his affection and good-will, infuses them into everything, and this is a fresh

¹ So long as the child remains ignorant of natural laws, and is not quite convinced that there are things without life, he has an immense propensity to attribute life to everything. It may be useful to place before the reader some facts in support of this statement; and, although such facts are common enough, and every one who has been in the habit of watching children could supply similar ones, I will avail myself of those collected by Mad. Necker de Saussure, as follows:—

"Give a child a sugar-plum in a box: he will open the box every minute to see if the sugar-plum is still there. Hide yourself behind a curtain, and his delight when he sees you reappear proves that it would have been to him a most sorrowful, but by no means unexpected, occurrence if you had not reappeared at all. The keenness of his joy springs often from his relief from certain fears we should not have suspected. This obscure personification of inanimate things often adds force to his impressions. Not only do his toy-soldiers become to him living beings, although at bottom he knows the truth of the matter, but his other playthings, the furniture, the things he uses, seem to him endowed with some degree of life; and the tears he sheds over their destruction show something more than regret for the loss of a thing that was useful to him: a real compassion mixes with it. 'Poor tea-cup!' he says, his little heart swelling as he looks on the fragments of the cup he has broken; 'I was so fond of it!'

"Moreover, the child believes in the life of whatever has motion,—the wind, the thunder, the flames, will to burn, to destroy, to carry away.

"In early childhood this illusion may be accompanied by deep and true feeling: the affection of little girls for their dolls is sometimes very touching. A very little girl whose leg had to be cut off bore the operation without a cry, only clasping her doll in her arms. 'Now I am going to cut your doll's leg off,' said the surgeon, sniiling, when the operation was over: the poor little thing, who had suffered so much

attributed the antipathies and enmities of certain animals towards others, such as that of the cat for the rat, etc. Given, then, this communication between sensitive beings, it must take place in the child also; but I do not think its action begins before that of the intelligent soul, and it appears to me that both have their point of departure in the first smile of the child.

129. Another principle of action belonging to pure animality (although a similar principle is also found in the order of intelligence) is that of imitation. We have already sufficiently explained it elsewhere. We will only add here that the animastic ² feelings make the explanation still more clear and easy. One soul feels that its companion is in a given state, say of joy. Sympathy—that is, the taking on of a fellow-feeling—arises from natural benevolence, and from sympathy comes the instinct of imitation. Sympathy, in this case, is the passive effect; imitation, its corresponding activity.

130. Among the pleasures felt by the animal, and which he soon learns to desire eagerly, is that of action. Action brings with it many special physical pleasures, the mere acceleration of the circulation of the blood increasing vitality and the sense of it. But there is a pleasure inherent in action itself beyond the partial physical pleasure belonging

¹ The reader who desires will find it in the Anthropology, Nos. 487-490.

² We give this name to the feelings excited in animals by their communications with each other.

³ It is necessary to know that certain feelings of the soul, such as joy for instance, are manifested through the sensual instinct in certain bodily movements, such as smiling. Vice versa, man perceives in his companion's smile the rejoicing soul. Having perceived this, he takes on the same feeling, and from the same internal gladness follows the same external effect of smiling. Sometimes the contrary happens; that is, seeing the smiling countenance, he, by the faculty which unites perception (passive) and reproduction (active), imitates the smile, and thence passes on to the joy manifested by it; that is, he sympathizes with it, because the smile and the sense of joy are united, and the one produces the other, and vice versa.

to any special action; for the greater our activity, the more we seem to live. Hence pleasure in action springs from, and grows with, experience up to a certain stage in the animal, and becomes on occasion the impulse to motion.

131. Finally, the animal faculties also put on habits. Physical nature is full of order, but this order itself undergoes some modification through habits. Moreover, habit makes certain actions easier and more pleasurable, and therefore makes any interruption or cessation of them more disagreeable. Hence spring habitual tastes and instincts, which in this way become, in the animal and the infant, a new principle of action.

To sum up: the activities of the child which belong to the animal order are as follows: 1. The instinct which springs from the want of avoiding pain; this is the primitive stage of instinct; 1 2. The instinct which springs from the want simply to feel and to enjoy pleasurable sensations; 3. The instinct towards animated things, whence arises sympathy; 4. The instinct of imitation following on sympathy; 5. The instinct and want of action, solely for the pleasure which arises from the exercise of active power; 6. Habit.

ARTICLE III.

THE ACTIVITIES PROPER TO THE SECOND PERIOD.

132. In the second period begins the action of intelligence; perceptions and imaginal ideas are formed; hence a new activity must be developed; for, as we have repeatedly said, every passive sensation awakens in man a corresponding action, and from the understanding must arise rational action, the action of the will.

The first motor of the will consists in those volitions which

¹ We are speaking of the sensual instinct; anterior to this comes the vital instinct, but that does not belong to the development of the child.

we have named affective, in which the subject that feels and wills, wills the object perceived, not because it is judged to be good, but merely because it is felt to be pleasurable; mysterious volitions, as difficult to understand thoroughly as intellectual perception itself. But, although aware that few have formed a clear conception of volitions of this kind, while many are ready to deny their existence, we are nevertheless constrained to admit it and appeal to those few who by earnest thought penetrate into the nature of such volitions, and to whom, therefore, their real existence ceases to be a matter of doubt.

It must be observed here that the sensual activity does not cease with the appearance of the intellectual activity, but the development of the child becomes more complex and more difficult to describe from the mutual influence of the sensual and intellectual operations, and from the multiplicity of their actions. Nevertheless, we must attempt to give a brief description of what takes place in the human being during this second period.

133. In the first period, the earliest sensations are those received from inanimate things, and not till later does the child experience the animastic feelings of which we have spoken.

But in the second period, in which the intellect is set in motion, the reverse takes place: the first step of the cognitive faculty seems, as we have said, to be that which leads man to perceive animated things; the child perceives his mother's soul in her countenance, and soon he begins to seek a life and soul in all other things, making it probable

¹ See Anthropology, Nos. 612-16.

² As the nature of this difficulty may not be at once apparent to the ordinary reader, it may be useful to explain that the difficulty lies in conceiving a volition without an intelligent motive, the latter being always a judgment of the understanding that the object willed is good. It is the presence of this motive which essentially distinguishes volition from instinct. — Note of the Translator.

that not till much later does he come to be fully persuaded of that great marvel, the existence of inanimate things.¹

As the animastic sensations by their nature produce in the child physical affection and from that sympathy, so the animastic perceptions produce benevolence, good-will, which is already an incipient habitual and affective volition. In fact, benevolence, which is a rational affection, cannot be conceived unless we suppose a living being towards whom it is exercised; for what is inanimate, if we conceive it really as such, and do not associate our conception of it imaginatively with some element of life, may indeed be precious to us for its utility, but we cannot love it, or feel towards it that affection termed benevolence.

134. Now the child, in the fulness of his affection and good-will, infuses them into everything, and this is a fresh

¹ So long as the child remains ignorant of natural laws, and is not quite convinced that there are things without life, he has an immense propensity to attribute life to everything. It may be useful to place before the reader some facts in support of this statement; and, although such facts are common enough, and every one who has been in the habit of watching children could supply similar ones, I will avail myself of those collected by Mad. Necker de Saussure, as follows.—

"Give a child a sugar-plum in a box: he will open the box every minute to see if the sugar-plum is still there. Hide yourself behind a curtain, and his delight when he sees you reappear proves that it would have been to him a most sorrowful, but by no means unexpected, occurrence if you had not reappeared at all. The keenness of his joy springs often from his relief from certain fears we should not have suspected. This obscure personification of inanimate things often adds force to his impressions. Not only do his toy-soldiers become to him living beings, although at bottom he knows the truth of the matter, but his other playthings, the furniture, the things he uses, seem to him endowed with some degree of life; and the tears he sheds over their destruction show something more than regret for the loss of a thing that was useful to him: a real compassion mixes with it. 'Poor tea-cup!' he says, his little heart swelling as he looks on the fragments of the cup he has broken; 'I was so fond of it!'

"Moreover, the child believes in the life of whatever has motion,—the wind, the thunder, the flames, will to burn, to destroy, to carry away.

"In early childhood this illusion may be accompanied by deep and true feeling: the affection of little girls for their dolls is sometimes very touching. A very little girl whose leg had to be cut off bore the operation without a cry, only clasping her doll in her arms. 'Now I am going to cut your doll's leg off,' said the surgeon, smiling, when the operation was over: the poor little thing, who had suffered so much

proof of what we have already said, that all things are to him alive and intelligent. When the little girl rushes to her mother's arms, and after having smothered her with kisses runs to kiss and caress the table or the chair, she certainly does not lavish her caresses on them as inanimate things. but pours out on them some of her affection for living beings. without stopping to consider whether these are living or not. Yea, the love of the sentient and rational creature supposes by its very essence a sentient and rational object, whether this be real or only imagined. Such, then, are the first affective volitions. And, as Nature implants first the sensitive affection as the preparation and beginning of the intelligent affection, which alone is truly love, so she implants in the infant, to dispose it to sensitive affection, a physical joy from its overflowing organic life, filling it with pleasure as the best preparation for the sensitive affection. Thus, in the

without a word, broke into a passion of tears at this cruel proposal." Other facts of a similar kind may be found in the 'Education Progressive,' L. III. c. v. Here I must point out that what takes place in the child's mind when we say that he sees life in another face, or in things that move, is not a process of reasoning, for to argue from himself to other objects would require far more advanced development than we suppose him to have reached. He has an immediate perception; in other words, he perceives something in the sensations produced in him by animated things, quite different from the effect produced by a dead and inert thing, and he finds greater pleasure in the former than the latter. Yet more: if that which man perceives is always an entity, a something that exists, as I have shown in the 'New Essay on the Origin of Ideas,' may we not suspect that life is essential to an entity, and that we have to make an effort to believe in an entity without life as almost an impossibility? This suspicion I will show to be a truth capable of demonstration in the Ontology, please God I publish it. Let it suffice for the present that I have laid it before my readers' minds as a suspicion and a conjecture.

Nations in their infancy attribute life to inanimate objects for the same reason as the child. This fact, both in the common people and in children, was observed by the ancients. Here are the lines quoted from the poet Lucillus by Lactantius, Instit. I. 23:—

Terriculas Lamias Fauni, quas Pompiliique Instituer Nume; tremit has; hie omnia ponit. Ut pueri infantes credunt signa omnia ahena Vivere, et ease homines; sic isti omnia ficta, Vera putant; credunt signis con inesse in ahenis Pergula pictorum; veri nihil; omnia ficta.

admirable constitution of the human creature, all is brought into union and harmony. The sensitive being, already full of happiness, is duly disposed to feel and attach itself to another sensitive being. In man this natural affection soon acts on the will, which finds pleasure in it, and generates within itself, as it were, the love, which again becomes the source of other rational joys, mingled with the primitive animal ones, and so, in a happy circle, disposing man to more affection and more love.¹

Assuredly, in that first dawn of human intelligence there is neither merit nor free-will nor conscience. But who that considers it attentively can deny that there is already a morality? What is morality but the act, or the disposition of an intelligent will towards other intelligent beings? If the will gives its affection to these beings, — that is, if it loves them as they require to be loved, —it is certainly good; but, if it assumes toward them an attitude of aversion and hatred, it is evil. The observation, then, of the natural benevolence of children confirms what I have asserted in the "Treatise on Conscience" respecting the existence of a morality anterior to conscience, as, on the other hand, the theories there put forward throw a vivid light on the results of the diligent observation of what happens in the earliest stages of infancy.

135. Yet more: the period of six months may be assigned as that proper to affective volitions. After that age, it would seem that a real judgment of the goodness

¹ Let me here again quote Mad. Necker: "Quand on pense aux plaisirs si vifs, si faciles de cet age, à ce présent, temps unique où se passe l'enfame, et temps dont notre amour peut si bien disposer en sa faveur, à cette gaité intarissable, à ces portes ouvertes de toutes parts à la joie, et fermés aux soucis et aux chagrins, qui peut se refuser à l'idée qu'il y a dans le contentement deces êtres si chers une dispensation de la Providence? Et si, comme l'a dit unhomme célèbre à tout âge le bonheur est l'atmosphère la plus favorable aux germes des vertus naissantes, ne semblet-it pas que l'Oronnateur suprême a voulu préparer la moralité de l'homme par la longue felicité de l'enfant?" — De l'Education Progressive, L. III. c. v.

of things takes place, which immediately leads to estimative volitions.¹

It is difficult to ascertain when the child pronounces a real internal judgment on things which are physically pleasurable to his senses, because, the pleasure being derived from the senses, there is no need of the understanding to excite him to action. But, in the case of a pleasure derived from something understood, there must be an intervening operation of the intelligence in order to produce it. Now, at about six or seven months old, we observe that the child begins to admire things as beautiful; and therefore it is certain that his intellect estimates things in themselves, and his will puts forth in consequence the volitions which we have termed estimative. Here morality once more makes its appearance, and here properly begins the practical estimation of objects as distinguished from the perception of them; while in affective volitions the practical estimation of things was one with the first perception of them.2

136. We see splendidly exemplified in these facts the disinterestedness which always accompanies a practical estimate having justice for its standard. But let us look at the facts more closely, and once more we will avail ourselves of those collected and attested for us by the able author of the "Education Progressive," whom we have already so often quoted, and to whose diligent observation and pregnant reflections we shall have to refer to again and again.

"Rousseau has well observed that, in certain dialogues between the nurse and the child, the words of the former and the inarticu-

¹ I distinguish estimative from appreciative volitions, giving the former name to those volitions which judge a thing to be good without comparing it with anything else, and the term appreciative volitions to those which judge a thing to be good as compared with some one or more other things.

² The perception of intelligent beings precedes, as we have said, the affective volitions. If these were preceded by the perception of entities not intelligent, they would involve no morality, for a moral volition must have its term in an intelligence.

late cooing of the latter have much the same modulation of sound. Often the baby coos over inanimate things, which it does not distinguish from the animate; but, though he may deceive himself in seeing life where there is none, he never overlooks it where it is.2 Sometimes his cooing is addressed to a shining metal button, sometimes to a pane of glass reflecting the sunlight, and seems to tell them that they are pretty and give him pleasure; he expresses his good-will toward them; sometimes he utters little cries, joyful and eager, as if to attract their attention. Still, we have here, as yet, no real language, if we mean by 'language' a means voluntarily adopted to exercise influence on others; the child is asking for nothing, he is not calling; he expects no result whatever from his little song. The infant, always in a state of absolute dependence, possesses less than any other living creature of the same age the means of self-defence, and yet he already manifests the two great prerogatives which are to raise him so high above other animals. The faculty of denoting objects by conventional signs has already been often mentioned as one of these; but there is another equally admirable and yet less noticed, which is developed long before the former: I mean the tendency so common in the infant to take an interest in a number of things quite apart from its instinct of selfpreservation. Already, at six months old, his life is no longer concentred in himself; it expands externally, and the mind begins to recognize those wide relations which one day will subject to it the material universe and to busy itself with laying out the lines within which it will ultimately embrace all things. The most intelligent among animals have an extremely narrow circle of interests: what does not serve to protect or feed them is to them as non-existent: they love, but do not admire; they have no curiosity: the child, on the contrary, takes delight in everything; he has pleasures which may be termed disinterested, so little do they depend on the senses: utility is nothing to him, while already he feels beauty; such as it

¹ Emile, L. I. Modulation or intonation is the result of several sounds, and yet presupposes a *unitive force* combining them into one. Hence we see how early that marvellous force, so little considered and almost ignored hitherto by philosophers, intervenes in the operations of the animal, whether brute or rational.

² It is, therefore, easier to the child to conceive an animate than an inanimate being; let that most remarkable fact be noted. The inanimate being is a mystery to the intelligence of the child; the animate being appears to him simple enough.

is to him he praises it, and his eyes sparkle with admiration. His weak voice raises a hymn of praise, at a time when he knows neither what will hurt nor what will benefit him."

Here we have already a sense of justice and a true morality.

CHAPTER III.

ON THE EDUCATION AND INSTRUCTION OF THE CHILD THROUGH
THE TWO FIRST PERIODS OF LIFE.

ARTICLE I.

ON RELIGION.

137. Christianity receives the child into its loving arms when he comes into the world, and piously closes his eyes when he goes out of it.

The following dogmas of the Catholic Church 2 are as comforting as they are salutary: 1. Jesus Christ saves men through an occult power, which he exercises over their minds for their improvement, and which is called grace; 2. This grace is attached to certain external rites, of which the Catholic Church is the depositary, and which are called sacraments; 3. The first of these sacraments is baptism, through which man is regenerated,—that is, he receives the principle of a higher moral, or rather supernatural, life; 4. The Catholic Church, besides the power of administering these sacraments, possesses that of blessing things and persons, God adding his own blessing to that of the Church,—i. e. his grace and favor; 5. The Church prays

¹ L'Education Progressive, L. II. c. ii. It is a fine and true observation of the same writer, that the term joli, pretty, with its counterpart ugly, are among the first words understood and made use of by children.

I beg to refer the reader here to the passage in my Preface stating my dissent from the Roman Catholic creed of any author, and request that it may be borne in mind as applying equally to all other portions of the work enforcing the doctrines or practices of the Church of Rome. — Note of the Translator.

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in the prayers of its members when the latter, being in communion with the Church, pray in her spirit, and such prayers are efficacious; 6. God always listens to prayer, and receives the offerings of men of good-will.

These previous dogmas being laid down, it follows that, though the child is incapable, during the two first periods of life, of himself performing religious acts, it is the office of his parents to perform many for him, that they may obtain from God for their child, already new-born through baptism, ever-increasing grace through the benefits and means provided on earth for men by the Saviour.

Religion, then, goes before the child, and does much for him ere he can do anything for it. Happy the parents rich in faith! Happy the child to whom such parents are given!

ARTICLE II.

THE ACTS OF THE WILL ARE STRONGER IN CHILDHOOD THAN IN ADULT YEARS.

138. It is commonly believed that the child's will, like his physical nature, is weak, and that as he grows older he grows stronger in the exercise of his will.

This view is the result of considering only the free exercise of the will, which is entirely deficient in the child, and which, when it has once begun, goes on increasing, so that an everwider circle of things is or may be brought under the dominion of deliberate action. In the child, on the contrary, the will acts spontaneously; and it is these spontaneous acts which we declare to be more powerful—that is, more decided and unrestrained—in the child than in the developed man. "Desires, affections, pains, pleasures, all are vivid and strongly marked in the child. As the various impressions and emotions are in themselves the main instruments of the child's development, so he is endowed with a singular eagerness in seeking for and multiplying them unceasingly.

Whatever affords a prospect of them he delights in. If his fancy is to go out, he springs towards the door, and the mere sight of his hat makes him quiver with joy from head to foot. If he is to be taken out in a carriage, he is so restlessly impatient that it is no easy matter to hold him. Motion, within him and without him, is his delight."

We cannot measure the degree of intensity of the child's pleasures or volitions, because the measure of those we feel in ourselves is our consciousness, which is not formed in the child, and it is extremely difficult for us to understand that mysterious condition of a being feeling pleasure and pain without any knowledge, any consciousness, of them.² Nevertheless, that is the condition of the lower animals, and very often that of human feeling also.³

139. Now there are two reasons why the feelings and affective volitions of children should be so exceedingly ardent and impetuous. The first is that, the object of such volitions being simple, the will throws itself into them with its whole force. I have already observed that the will is in

¹ Mad. Necker de Saussure, L' Education Progressive, L. II. c. iv.

² It may be useful to explain here that by "consciousness" Rosmini means the act of the intelligence recognizing by reflection our self as doing or suffering. "To be conscious," he says, "is to know our act as our own,—that is, to know the act and at the same time to know that we are its authors. Now, this knowledge we cannot have except by means of another act by which we reflect on what takes place within us." (New Essay, No. 1391.) The same applies to knowledge of a sensation as our sensation, and of ourselves as feeling it. It is evident that this knowledge belongs to a much more advanced stage of intellectual development than is included by the author under the first and second periods of childhood. The steps by which it is reached form the subject-matter of later portions of this work.—Note of the Translator.

³ The sagacity of Liebnitz recognized the existence of a sense of pain and pleasure without consciousness; but he restricted this to slight feelings which he improperly called insensible. We are of opinion that the sense of pain or pleasure may attain any degree of intensity, and yet remain entirely separated from consciousness. This is one of the most important of natural facts, to which, I observe, no sufficient attention is paid. Cousin and Galuppi both overlook it, and the latter declares the subtle observation of Liebnitz to be absolutely false. See *The Philosophy of the Will*, by Bar. Pasquale Galuppi, Vol. I. p. 1, c. ii. n. 19; see also New Essay, No. 288 and foll.

its nature infinitely susceptible and mobile: I must here add that its power is greatest when it is not divided and dispersed on many objects which, by drawing it in opposite directions, interfere with and neutralize each other.

This also gives the reason why the common people act with more impetuosity than cultivated persons. I have especially observed that peasants, where they feel at all, feel with great intensity, be it pleasure or pain. The same character of ardent and decided volitions is seen in the nations of antiquity: they have the same vivid life, enthusiasm, passion, which we find in children.

140. The second reason of the vivid affections and volitions of children is, that they tend directly to the object perceived, while adults conceive the objects in the abstract, and make the act of the will pass, as it were, through a long series of general ideas before it arrives at the object itself. But I reserve till later on the development of this reason, which deserves fuller consideration.

It is true that the first ardent feelings and volitions of children are easily changed into contrary ones; but this proves nothing against their intensity, but only that they are very mobile, and that the transitory and ephemeral nature of their objects, which are for the most part very trifling, does not admit of any persistent duration.

ARTICLE III.

THE TENDENCY OF EDUCATION IN EARLY CHILDHOOD SHOULD BE RATHER TO CULTIVATE FEELING AND VOLITION THAN INTELLECT.

141. If, then, the feelings and volitions of children have a greater force and intensity the less their intellect is developed,—the child willing with his whole being, and bending all the strength of his will towards a few simple objects,—it is manifest that mothers should take advantage of this condition of the infant mind, and attend at this early stage to the training of feeling and will rather than of reason.

142. The mind of the child should be filled betimes with that good-will towards others for which Nature has happily formed it. This benevolence, this universal affection, springs up naturally, as I have pointed out, in the atmosphere of joy and brightness which should be maintained as much as possible in the child's mind.

The joyousness of the child should be gentle, habitual, serene, not fitful and wild. By preserving his placidity, we not only incline his mind to gentleness and benevolence, but also favor his intellectual progress: the latter requires for its due and orderly advance the calm and placid condition in which alone the child can collect its attention. This condition is the more important the more the child is subject to the distractions arising from the extreme mobility of his organs, feelings, and thoughts. Mad. Necker admirably observes that, "when the attention of the child seems captivated by any object, care should be taken not to disturb it. Whatever interests him becomes an object of observation and assists his development."

ARTICLE IV.

THE ACTIONS PRODUCED BY THE ANIMAL FEELINGS ARE CONNECTED BY THE LAWS OF NATURE: THE EARLIEST VOLITIONS, AND THE INTELLECTUAL FEELINGS CONSEQUENT UPON THEM, ARE IN THEMSELVES DISCONNECTED.

143. We have described in the "Anthropology" the marvels of the *unitive force* in the animal,—of that agent which, springing from the unity of the subject, produces effects rivalling those of reason.

One of the properties of this force is to bring into play contemporaneously the several powers of the animal, both passive and active, and to obtain from them a single result. Such are the effects of the instinct of sympathy, of imitation, and other animal operations, in which the multiple are

¹ De l'Education Progressive, L. II. c. iii.

reduced to unity, the various to an admirable simplicity. By this property, all the sensations and motions of the animal at each moment are so wonderfully co-ordinated, that he feels and does a multiplicity of things which to him are only one thing.

144. Now it is true that the operations of the human understanding also are endowed with a certain unity by the perfect unity of the sentient, intelligent subject; it is true that the unitive force presides equally in the domain of sense as in that of intelligence; or rather reduces these two orders into one, because it is the agent of a subject in whom sensation and understanding equally have their origin. But there is a wide difference between these operations of the animal and those of the intelligent being: the former, having arrived at subjective unity, have got all that is possible to them; the latter, on the contrary, require besides objective unity, without which they cannot be said to be ordered and combined.

145. The reason of this difference is that the animal order has no reference to an object, and, when the operations are in unison, all is in unison. But the intellectual order does not consist in mere operations, but in the possession of objects not only extraneous to the subject, but counterposed to it. It is not enough, therefore, that the intellectual operations should be unified: the unity required is that of their objects; and these, in the second period of childhood, are in themselves entirely unconnected, the child not having yet thought of the relations between them by which they are bound together and harmonized.

This observation appears to me to deserve attention as capable of throwing no little light on the mode of directing the child's education.

ARTICLE V.

OBSERVATIONS AND EXPERIMENTS THE CHILD SHOULD BE LED TO MAKE.

146. The importance of the above observation will be seen if we consider in what consists the only instruction which can be given in the second period of childhood, and which corresponds to the first order of cognitions.

But, before I treat of this most elementary instruction, I must remark, once for all, that, in laying down the kind of instruction that should be given to the child as corresponding to the first degree of intelligence, I do not mean to affirm that such instruction should be given only during that brief period of life in which cognitions of the first order are actually being formed. I desire merely to establish what is the instruction which may be safely given at any, even the earliest, period of life, because it requires only that the intellectual faculties should have reached their earliest stage of development. This holds good also in the more advanced stages. Instruction of any order is always fitted to the age above it, and only unfitted to the age below it.

147. I say, then, that to the disconnected intellectual acts or cognitions of the first order correspond observations of sensible external things which are equally disconnected, being as yet bound together by no process of reasoning.

Hence the first grade of instruction consists in leading the child to use his own senses in the observation of external objects, and in making him experiment on them. Our aim in this is a high one. It is, by following Nature herself, to train the child to be an observer and experimentalist,—to direct his attention agreeably, constantly, and judiciously, without ever forcing or disturbing it.

should attain cognitions proper only to a later period, yet it is possible that he should attain those proper to a preceding one.

That he cannot have cognitions belonging to a period of life still in the future, is as evident as that he cannot reflect upon thoughts which he has never had. Hence we see clearly why the cognitions of the second order can never be attained by the child who is not in possession of those of the first, since the former are only his own reflections on the latter.

We shall understand how the child in his third period is able to attain cognitions proper to the preceding one and grasp them clearly, if we bear well in mind this principle, that "the active powers of man are set in motion only by external stimuli, and are exerted just so far as and no farther than these have power to excite them." It follows that the sufficient reason of each step of intellectual development should be sought, not in any supposed activity within the child's mind, but in an external impulse. I have shown in the "Ideology" that it is an error to imagine that the child has within himself a motive-power adequate to produce all the acts of which he is capable. Those who hold this view do not observe nature, but invert it. The following facts will be sufficient to prove how completely gratuitous is their The most powerful of all the faculties set in motion in infancy is the imagination. If, then, there were any faculty to which independent action could be attributed, it would assuredly be this; but the fact to which I allude proves the contrary, and constantly demonstrates that the childish imagination, so susceptible of impressions, is incapable of inventing anything of itself. "Fortunately," says Mad. Necker, "this lively imagination is not creative. Children left to themselves may be frightened by a black man, a chimney-sweeper, a mask, and remember them with terror; but they seldom make to themselves chimeras. Very

proceedings and experiments of children, too often only disturbing them in their work of placid observation and experiment, - for childish play and movements, and the child's delight in them, may all be reduced to observation and experiment, - not understanding the wisdom that underlies them, and trying to turn their pupils' attention to other objects, fitted only for adults, in which they themselves find pleasure and consider of importance. This fact has often led me to ponder and ask myself why it was that the Divine Master never reproved anything in children, but rather praised everything in them, while, to the severity of human wisdom, that early age seems so full of frivolity and devoid of any serious purpose. Not so, apparently, was it judged by Jesus Christ. Rather it would seem that in those childish exercises he saw something very different from mere play and loss of time, - an intense activity of the mind, eagerly aspiring to know, to grasp the truth, by which l'anima semplicetta che sa nulla ("the simple soul, ignorant of all"), though created to know, throws itself impetuously into the world of sense, to seize, in whatever way it can, some intelligible notion of it, ceaselessly observing and experimenting on the objects presented to it by the senses.1 It behoves us, then, with inexhaustible patience, to follow the child in this most serious and continual study of his early age, and to help him by regulating it.

ARTICLE VIII.

THE ORDER TO BE INTRODUCED IN THE PERCEPTIONS OF THE CHILD.

151. It is not my purpose to determine here in what order sensible objects should be brought before the child: it is

¹ What I have said here does not preclude the fact of the original disorder in children which makes their will infirm and their sensual instincts powerful. A very little observation of them is sufficient to make manifest the truth as regards the germ of evil deposited in the new-born child taught in the traditional doctrine of Christianity.

enough to observe that it will be well to study some order, and that from such an order, especially if well chosen and used by a judicious teacher to guide the child's perceptions, great advantage would be derived in preparing and accelerating his future development. I will only touch upon some points which may afford, as it seems to me, useful indications to sagacious teachers of little children, whether men or women.

152. The first of these is, as much as possible, to make the life of the child regular. "When," says Mad. Necker, "the impressions themselves recur continually in the same order, the most painful will in time be softened, and the expectation of the pleasant ones will never be deceived. To find themselves deceived is felt keenly by children, and the source of bitter tears." This regularity of life is of the greatest advantage to children throughout their infancy.

The child should be provided in abundance with objects to look at, touch, examine, and experiment upon,—in a word, to perceive, and perceive ever more and more accurately. The objects chosen should be those which most attract his attention, which will also be those which satisfy his wants, his desires, and give him pleasure; for it is only by these that his attention is aroused (97, 98).

153. It will be found useful also to present to him simple objects, following a certain order, — for example, the seven colors of the rays of light, one after the other; also white and black; and, still better, the harmonic scale of colors, the succession of which will delight him.³ Let him hear, in the

¹ It is precisely this order which Freebel has worked out and carried into practice in his Kindergarten system. He and Rosmini, independently and in total ignorance of each other, based their principles of education on the laws of human nature and development; but Freebel went on to the complete practical application of these principles to the education of children from the cradle upwards.—Note of the Translator.

² De l'Education Progressive, L. II. c. iii.

³ See Anthropology, Nos. 443 and foll.

same way, the seven primary notes, first in succession, then by degrees in their harmonic intervals and chords; then give him regular solids to play with, to the proportions of which, in form and measurement, his eye and hand may become accustomed, at the same time that they impress themselves on his imagination. Later on, but not till much later, the child may be familiarized with more colors, more sounds, more forms harmoniously combined, but always by degrees, and never passing on to a new play till he shows weariness of the old. It must be evident that, besides other advantages, the reception of so many well-ordered images into his mind will both provide fitting material for his future reflection, and facilitate the intellectual operations he will soon be called upon to undertake, not to mention that his mind itself receives a precious moral benefit from insensibly conforming itself to order, and being trained to the feeling of beauty.1

¹ The whole series of Frœbel's Kindergarten "Gifts" and "Occupations" are the practical development and application of the above pregnant hints.— Note of the Translator.

SECTION III.

ON THE SECOND ORDER OF COGNITIONS, AND THE CORRESPONDING EDUCATION.

CHAPTER I.

THIRD PERIOD OF CHILDHOOD.

154. The first sign of intelligence in the child is the smile which marks the beginning of the second period of his life.

As the work of the first period of infancy is the awakening to life, and bringing into communication, through their proper stimuli, the infant's own senses with foreign bodies, so the work to be accomplished in the second period is, as regards the order of sense, to bring into harmony the sensations of touch with those of sight, and, in the intellectual order, to give the first impulse to the understanding by means of perceptions and of imaginal ideas. A child does not learn the complete use of his hand, and how to regulate its movements with regard to the objects he sees, till he is about eight months old; and he is nearly a year old before he tries his first tottering steps and utters his first articulate sounds,—both signs of the new period which dawns with the second year of his life.

155. It is, then, with language that the third period begins. To learn the *signs* of things is indeed a new and great step in human intelligence; the first word which the child understands and pronounces is an important epoch for the whole of life: to this period belong the cognitions of the second order.

Before entering into these, I would again remind the reader that, as the instruction proper to the first order should

not cease with the second period of life, but be continued progressively, so the instruction proper to the second order, although belonging to the third period, is always useful and often necessary, through all the periods that follow.

CHAPTER II.

WHAT ARE THE COGNITIONS OF THE SECOND ORDER.

ARTICLE I.

WHAT ARE THE COGNITIONS OF THE SECOND ORDER IN GENERAL.

156. When the attention of the child fixes itself upon the cognitions of the first order, obtained during the first period of his life, his thoughts about them are termed cognitions of the second order. These cognitions consist in the *relations* perceived to exist between the cognitions of the previous order.

But let it be carefully observed that these relations are primary and immediate, and not yet the relations between relations.

In order, then, to know which are the cognitions of the second order, we must distinguish carefully the immediate relations between the cognitions of the first order from all the relations which are afterwards discovered between those primitive relations themselves.

ARTICLE II.

TWO KINDS OF COGNITION BEYOND THE REACH OF THE MIND AT A CERTAIN PERIOD OF LIFE,—THE ONE BECAUSE IT IS OF TOO HIGH AN ORDER, THE OTHER BECAUSE IT DOES NOT ATTRACT THE ATTENTION, WHICH LACKS THE NECESSARY STIMULUS.

157. We must here observe that the cognitions attained in the third period of childhood are not all cognitions of the second order; for, although it is impossible that the child

should attain cognitions proper only to a later period, yet it is possible that he should attain those proper to a preceding one.

That he cannot have cognitions belonging to a period of life still in the future, is as evident as that he cannot reflect upon thoughts which he has never had. Hence we see clearly why the cognitions of the second order can never be attained by the child who is not in possession of those of the first, since the former are only his own reflections on the latter.

We shall understand how the child in his third period is able to attain cognitions proper to the preceding one and grasp them clearly, if we bear well in mind this principle, that "the active powers of man are set in motion only by external stimuli, and are exerted just so far as and no farther than these have power to excite them." It follows that the sufficient reason of each step of intellectual development should be sought, not in any supposed activity within the child's mind, but in an external impulse. I have shown in the "Ideology" that it is an error to imagine that the child has within himself a motive-power adequate to produce all the acts of which he is capable. Those who hold this view do not observe nature, but invert it. The following facts will be sufficient to prove how completely gratuitous is their The most powerful of all the faculties set in assumption. motion in infancy is the imagination. If, then, there were any faculty to which independent action could be attributed, it would assuredly be this; but the fact to which I allude proves the contrary, and constantly demonstrates that the childish imagination, so susceptible of impressions, is incapable of inventing anything of itself. "Fortunately," says Mad. Necker, "this lively imagination is not creative. Children left to themselves may be frightened by a black man, a chimney-sweeper, a mask, and remember them with terror; but they seldom make to themselves chimeras. Very rarely will they dwell upon an idea that has not been suggested to them." 1

158. Now the incitements which arouse the intellectual activity in the first period of infancy are no other than the primary physical wants, which set in motion the whole activity of the human being to endeavor to satisfy them, including the intellectual activity, which then takes that first step of which alone it is yet capable. As those wants, however, are few, and, once satisfied, demand nothing more, they do not spur on the human mind to all the perceptions and imaginations it is capable of, but simply to those that are necessary. For instance, the fundamental feeling, and the idea of being in general, constitute material for the intellectual attention which can never be absent; and vet that attention does not fix upon it, and the fundamental feeling and the idea of being in general are among the last, and are held to be the most difficult, subjects which can occupy the human mind. Why is this? Surely not because any one thought is in itself more difficult than another, which there is nothing to show; but that man reflects on these matters very tardily, because only very tardily does the stimulus to it come to him: for a very long time nothing impels him to it; he feels no want, no desire for it, and never will he make an exertion without a sufficient reason.

159. I have already observed elsewhere ² that, when man reflects on his previous reflections, the act of reflection may concern itself with two different things, — either with the objects of the preceding reflections, or with the reflections themselves, — that is, with the operations of the mind. Every cognition, then, presents a double material for succeeding reflection, — the objects we have learnt to know, and the intellectual acts by which they became known. But, though

¹ De l'Education Progressive, L. III, c. v.

² Trattato della Cosaenza Morale, "Treatise on the Moral Conscience," B. I. c. iii.

this double material is given to the mind at the same time, the reflections which it awakens on the known objects seem always to be more easy, and are made much earlier than reflections on the processes by which they are known. In short, the mind dwells rather on its own knowledge than on itself as knowing and its acts of cognition, and, for the reason before given, that the motives which impel it to the former are earlier and more powerful than those which draw its attention to its own operations.

Thence it follows that the method of teaching will reach its perfection only when we have arrived at determining accurately what cognitions are proper to each period of childhood, because only in that period do we find the material of them, together with the sufficient motive necessary for their attainment; and what cognitions are proper to the different periods, because the motive to attain them is then first felt, although their matter may have been possessed much earlier.

160. There are, then, two kinds of development in human cognitions. Some are not formed earlier because their matter is wanting; some because, though the matter is present, the mind wants the impulse necessary to fix its attention upon it.

Those cognitions of which the matter is wanting are impossible to be formed. Those to which the impelling motive is wanting are not actually impossible, but nevertheless are not formed from the absence of inducement.

161. Hence the method of teaching will be perfect only when, 1. The child's understanding shall be required to perform only those acts for which the *material* has been previously given to him; 2. That no such acts shall be required of him where the necessary *motive* is wanting.

The materials are given successively, and this succession constitutes the successive orders of cognitions. The motives

are also given in succession, and it is these that render possible the cognitions for which the child already possesses the materials.

162. But let us now return to consider the cognitions of the second order, and in the first place let us inquire what moves the attention of the human creature towards them, premising that there remain a number of cognitions of the first order which are not acquired in the first period of life, and must be acquired in later periods. Hence many of the cognitions acquired in the second period by the human mind belong to the first order.

ARTICLE III.

WHAT IS THE MOTIVE WHICH IMPELS THE CHILD TOWARDS COGNITIONS OF THE SECOND ORDER.

163. Language, whether vocal or composed of signs of whatever kind, gives the stimulus which impels and helps the human mind to attain cognitions of the second order.

Let us examine the nature of this stimulus. To lead the human mind to pass from the first to the second order of cognitions, it is not sufficient to fix attention on the first: for thinking of the cognitions already attained does not bring new cognitions but simply recalls the old, unless the thought adds something new to them; in other words, unless it discovers the *relations* between them which was impossible to it in the first order of cognitions.

Now, language, which the child hears from those around him, does precisely this:—

- 1. It moves the human understanding to reflect on its first cognitions; and, 2. Through these reflections, to arrive at new cognitions, i. e. those of relation, which bind together the things first apprehended; and in this perception of relations consists the second order of cognition.
 - 164. We must briefly inquire whence comes this potency

of language. We must begin by admitting that man receives from Nature a predisposition to speech. Whatever he feels gives an impulse to the organs of the voice, so that he, and indeed the animal in general, is instinctively impelled to utter sounds. But the knowledge which man acquires gives him new feelings, and the sounds these impel him to utter form the material of language.¹ To utter sounds following upon feelings is, therefore, a necessity of man's nature, a want felt by him, although such sounds are not yet speech, but only the materials of speech.

Another natural predisposition to speech is given to man by sympathy and the instinct of imitation,² which incline him to repeat the sounds he hears,—an inclination which exists, though in lesser degree, in many of the lower animals also.⁸ But to repeat the sounds heard is not to speak, but only to execute the material part of speech.

A third predisposition to language springs from the intellectual development the child receives in the brief space of its second period of life. The understanding has been, as we have seen, brought into action by the physical wants which invoke its aid, as it were, to satisfy their demands. It has answered to the appeal and done all that it could, and this all was to perceive, to generalize, and to will the things perceived. But the wants are continual, and go on demanding continually the help of the understanding, which is ever ready to give it, and now can do more than at first. Even

¹ See the Anthropology, No. 455 and foll.

² Sympathy and the instinct of imitation are straitly bound together in the child. I have observed that every passive faculty has its corresponding active one: sympathy, then, is the passive faculty, whose corresponding activity is the instinct of imitation. The latter has been explained in the Anthropology, No. 487 and foll.

³ Daniel Barrington. Vice-President of the Royal Society, London, has proved by various experiments that the song of birds is only the repetition of what they hear, and that, if a young bird is taken from the nest and placed with birds of another species, it learns the song of its new companions.—See *Philosophical Transactions*, Vol. XV., and the *Journal de Physique*, Juin, 1774.

⁴ Generalization is the faculty of the imaginal ideas.

in his purely animal condition, man, through the synthetic¹ force, seeks to help himself through whatever is at hand, things or persons, that are to him sources of sensation. His intellectual attention, thus turned to all sensible things around him in order to make use of them, fixes also upon the language he hears, which at first is nothing more to him than a series of sensations reaching him through his hearing. But he very soon discovers that he can derive greater advantages from the use and interchange of these sounds, and through them get himself obeyed—that is, helped—by the persons around him, and he gives his whole attention to learning how to use them so as to attain his ends.

In this manner, language becomes a fresh stimulus, occasion, and assistance to the child's intellectual attention.

ARTICLE IV.

THE TWO KINDS OF COGNITION TO WHICH LANGUAGE IMPELS THE CHILD'S INTELLIGENCE.

165. Let us see now what are the new cognitions to which the child advances by means of the language he hears, and which he learns from those around him.²

These cognitions are of two kinds. Some are cognitions of the first order, which the child could not attain earlier because the necessary stimulus was wanting to rouse his attention to them. Others are cognitions of the second order, which he could not attain earlier, because not only the impulse but the matter of them was wanting.

ARTICLE V.

WHAT ARE THE COGNITIONS GAINED BY THE CHILD THROUGH LANGUAGE.

166. The child, by means of the unitive force, first connects the sensation which he receives from hearing a name

¹ The marvellous operation of this force has already been explained in the Anthropology, Nos. 458-483.

² I allude here only to vocal language. The reader can apply my remarks to all language, such as signs, — those, for example, used for the deaf and dumb.

pronounced with the object that name signifies, so that the sound of the name immediately recalls to him his perception of the object, or its idea in his imagination.

This fact demonstrates that language must give the child a greater aptitude for recalling the memory and idea of things.² Without this help of language, he could recall them only by their falling again under his senses, or by some accidental motion of the fibres of his brain; with it, the sound of a word, or the recollection of it, brings back to him the memory and the idea of objects. Language thus becomes to him a sort of artificial memory, and serves to increase his use of the faculty of recollection.

167. Absent things, then, which could only be recalled to the child's mind by accident, are easily recalled by the use of language, and it would seem that only by that use could he form the conception of the absence of things. For his recollection of perceptions shows him things in the time and place in which he perceived them, and therefore as present; the *imaginal ideas* show him the thing as possible; but

¹ The union in one feeling of the visible perception with the sound causes the child when he receives the former to utter the latter, because, 1. The object perceived; 2. The sound; and, 3. The act of pronouncing the sound, become to him inseparable things. Mad. Necker rightly observes: "The child, in pronouncing his first words, takes pleasure in exercising a special faculty. If he sees a dog pass in the street he utters its name, as he has arrived at learning it, but he has no other motive in the utterance than the pleasure he takes in it. He is moved neither by fear nor hope. If he were afraid of the dog, he would cry; if he wanted it, he would throw himself towards it with cries of impatience; but he only names it in a state of perfect calm." (L'Education Propressive, L. II. c. ii.) The reason of the fact observed by Mad. Necker is that the child pronounces the word dog so soon as he sees the dog, to complete in himself the one feeling composed of the three elements above mentioned, as I have explained at length in the Anthropology.

^{2 &}quot;Children," observes Miss Edgeworth, "help themselves, by certain movements, to recall the ideas they acquired in association with those movements." This subtle observation shows afresh how Nature herself inclines the child to connect ideas with sensible things, and proves the existence of the unitive force pointed out by me in both animals and man.

³ Rosmini uses the term "imaginal ideas" to denote the images produced in the mind of things actually seen. There will, therefore, be as many imaginal ideas as there have been things seen. — Note of the Translator.

language teaches him, in addition, that the thing he had perceived still exists though it be not present. He becomes aware that a thing can exist, whether it be present to his senses or not, in a place where it does not fall under his senses. This is already a great step for him to have taken, since by this operation of his mind he perceives that the substance of the object is, not its action upon him, but something that subsists, although not felt by him.¹

This step also impels the mind towards the knowledge of invisible things.

Moreover, as the number of absent things is infinitely greater than that of present ones, if we consider language under this aspect only, we see that it opens a way for the child to more than double his first acquisitions of knowledge.

ARTICLE VI.

WHAT ARE THE COGNITIONS OF THE SECOND ORDER GIVEN TO THE CHILD THROUGH LANGUAGE.

168. A still greater step is taken when, by the help of language, the child passes to cognitions of the second order. To trace how this takes place, and ascertain the different kinds of cognition of the second order, we must analyze the process by which the child arrives at expressing his cognitions in words.

In the first instance, the word is only a sensation which he connects with certain images through the second function of the *unitive force*,² whence with the recurrence of the sensation recur also to his mind the associated images. Afterwards the process is reversed, and the child having previously the image and the sound, when the sensation which corresponds to the image is revived he is carried on to complete

¹ The absent object is not, however, conceived without any relation to sense. See *Principii della Scienza Morale*, "Principles of Moral Science," ch. ii.

² This second function is that of "associating sensations and images." See the Anthropology, No. 463 and foll.

The child corrects the mistake he has fallen into, when the discovery of new differences between things makes him perceive that he has given to a word a wider meaning than other people: he then restricts the meaning, at the same time restricting the abstraction he had expressed by it, and thus determining its characteristic or abstract element more precisely, reducing it from the general to the specific, or from a larger to a smaller genus.

175. We must, therefore, assure ourselves that the child has arrived in the use of words at recognizing that there is an element common to several things, and that he adopts that element, whatever it be, as the sign by which the things to which the word is applicable are distinguished. Then only can he be said to have performed the first process of abstraction, which forms the cognitions of the second order.

speech, it was necessary to invent two names as signs of these two species, instead of having one name which was only the sign of a genus; or whether (which was the easier way) this reflection was suggested to him by others, teaching him that they reserved the word dog to signify one species, and horse to signify another, and the name quadruped, or a similar one, to signify the genus. A similar error of excessive abstraction is that pointed out by Cook, and referred to by me in the New Essay, n. 155. Now this same fact observed in savages is observable also in children when learning to speak. They always err by attributing to words too general a meaning, because their minds are naturally more inclined to the general than the specific. "I have seen," says Mad. Necker de Saussure, "a child who called all fruit - plums, cherries, currants, grapes, etc. - alike apricots; another gave the same name to two little girls dressed alike." (De l'Education Progressive, L. II. c. vi.) I have observed the same thing in a little girl, and referred to it in the Restoration of Philosophy, etc., B. II. c. xxxi. Some think they can explain this fact by attributing it to the poverty of language in the child and the savage; and undoubtedly it does spring from poverty of language. But why should this poverty determine the mind to attribute to known words a generic signification rather than to invent a new word, or at least to acknowledge ignorance of the name of that new thing? Why does the mind tend to believe that, with the few words it possesses, it can signify all things, instead of taking them rather as words expressing a few individual, or at any rate, specific things? Does not this fact make it clear that it is the natural tendency of the mind which leads it to put into the meaning of words the widest generic conception it can? Certainly it could not see in them a very general conception if the multitude of words forced upon it the multitude of specific differences in things. The mental processes, then, of those who have a poor vocabulary, show that in man the indeterminate and general precedes the less general and better determined.

ideas, and thus serves to recall the latter. In this case, the word is a sensation and also a perception, which impels the child to turn his attention to the associated idea, and that so rapidly and simultaneously that he seems to see the idea in the word the moment he hears the latter.

The words which recall to the mind either past perceptions or imaginal ideas cannot be said to impel the understanding to the reflections which constitute a new order of cognitions, but only to those in which the understanding reviews its cognitions of the previous order. It is true that, as a relation exists between the word and the imaginal idea or the memory of the past perceptions, that relation belongs to cognitions of the second order, which we have defined to be "cognitions having for their object the relations between cognitions of the first order." But it should be observed that the word may recall to us the imaginal idea without our conceiving intellectually the relation between it and the idea: it is enough that there should be a physicial nexus causing the attention, so soon as it is struck by the sound, to turn to the idea.

170. There is yet a third process which the word induces in the mind, without, however, forming in the latter cognitions of the second order. The process of which I speak resembles abstraction in its effects, but is not abstraction, though leading to it almost immediately. When the child hears a word used as a name for several similar things,—for instance, "horse," each time that such an animal passes,—he does not at once abstract the common qualities of the horse (which yet he is capable of remembering); but he believes that the horse then passing is the same as the one he saw before and heard named "horse," because he has not yet observed the difference between the one he sees and the one he has seen. The word recalls to him the perception, together with the imaginal idea of the horse seen before, and

ences, and concentrates his attention on the likeness common to them all.

- (2) This common element having become the exclusive object of his thought, he uses it as a sign by which to recognize the object he has to remember every time he hears the word "dog." 1
- 177. And let it be noted that he does not connect the sound dog with that element only, but with all the objects in which he recognizes that element.

That element has been abstracted in the child's mind, but is not yet named. The word dog does not indicate only that abstraction, but includes all the objects in which that abstraction resides: it cannot be understood unless the mind has formed the abstraction which it presupposes and by which it is determined, and yet "dog" is not an abstract but a common name.

Hence it appears that abstractions assume two forms in the mind,—the one unnamed, which is the foundation of the common name; the other named by means of abstract names. To use the word white substantively is to use a common

1 I have again and again affirmed that the attention of the human mind, which does not act of itself, but only when excited from without, would never fix itself on an abstract quality of objects without the help of words, which the child gets from the society in the midst of which he lives. It follows that man could not have invented that part of language which expresses abstractions, - by far the larger part of it and very nearly the whole. I have supported this assertion by arguments which I believe to be irrefutable. But the experiments I have made on children have furnished me with a new one, and these experiments are corroborated by a mother who is also a sagacious and diligent observer. I mean Mad. Necker de Saussure. Sheattests the following most true observation: "As it is too often said that languages have sprung from wants, and are only perfected cries, I am in a position to certify that, at least as regards children, this is not the case. I will add that the child does not invent words, but only repeats, as best he can, those he hears spoken. Neither does he call an animal to him by his cries, unless the example has been set to him. Hence spoken language, in its most unformed stage, is the result of imitation and teaching, and always seems to have something of a foreign origin." (L'Education Progressive, T. I., L. II. c. ii.) This single observation made on the child disposes of all the romances of Bonnet, Condillac. Soave, and others, relating the imaginary story of the two infants lost in a forest and composing a language.

To produce these, and principally abstraction, is their fourth office, which must be carefully analyzed.

Only proper names as accepted by mankind are signs of perceptions, or of the memory of former perceptions: all other words are signs of universals. Nevertheless, the demonstrative pronouns this, that, etc., joined to the common name, apply or restrict it to signify perceptions, — i. e. real objects perceived.

If we examine the rest of the words besides proper names of which language is composed, we shall not find a single one intended or applicable to signify *imaginal ideas*. When, therefore, we said that one of the first uses the child makes of words is to recall such ideas to his mind, we spoke only of the childish use, differing from that of a later age, because the child does not yet know the value of the common use of the word.

172. That this is the case will appear manifest if we observe how absolutely useless it would be to invent words to express imaginal ideas. For the latter are infinite, and differ from each other by distinctions so minute that it is of no importance to men to note them, and would, on the contrary, be a great hindrance to quickness of thought or In the first place, the perceptions of a thing vary in the man himself according as he perceives more or less of it; and as the perceptions so also will the images vary, and the imaginal ideas which rest on the images. therefore, be impossible to have a word for each of these ideas. In the second place, such ideas vary in different men; hence, if a man wanted to express by a word his own imaginal idea, he could not be sure of being understood by others who have not that particular idea. In the third place, it is. enough to consider what Plato says, "that every real and finite thing is continually undergoing change, destruction, and regeneration." Take, for example, a horse: he is changing

every hour he lives; he must, then, excite a new imaginal idea. It would be enough that a single patch of his coat should turn gray, or his ears grow the tenth of an inch in length, to make a new name necessary for his type, for the complete idea of him. It is, then, impossible for words to signify such imaginal or complete ideas, although the child, who has perhaps no others in his mind, revives them by the sound of the words through the analogy they have with the abstract ideas which the words are used to express by mankind in general.

173. The full idea not being signified by words, it remains unobserved, and philosophers themselves jump from perceptions to abstract ideas without attending to the full ideas which stand between, as we have pointed out.¹

We must, then, bear in mind that language contains not a single word (except proper names, demonstrative pronouns, and certain adverbs of time and place) which does not express an abstract idea.² In talking to a child, then, we are continually drawing the attention, not to a universal only, but to an abstraction; and it is this operation, perfectly new to him, which leads him to cognitions of the second order, and which we must investigate with the greatest care.

When the child hears the house-dog called "dog" again and again, and hears it equally called a "dog" when small and

¹ New Essay, No. 761 and foll. Let those who pretend that the natural progress of the human mind is, step by step, from the particular to the general, duly consider this fact. The imaginal ideas, which are the earliest and the nearest to the particular perceptions, do not in any degree arrest the intellectual attention of man, who passes on directly to abstract ideas, which alone he expresses in words and alone makes the object of his discourse. This fact might disabuse all bona fide sensationists if they observed it properly. I do not know a single modern philosopher who has recognized the universality of imaginal ideas, and, when I have succeeded in making any one aware of their existence, he has rejoiced over it as a discovery. Plato, among the ancients, seems to have been aware of them, and I have used this conjecture to interpret some passages of his concerning species which seem to me inexplicable without it.

² It is necessary always to bear in mind the difference between abstraction and generalization, of which we have spoken in the New Essay, No. 490 and foll.

lapping milk and when grown bigger and eating bread, when it has its ears and tail and when both are cut off, and hears this one word "dog" applied to all the street-dogs, whether large or small, rough or smooth, standing still or running, quiet or angry, there comes a time when his mind fixes upon the one thing for which that common name of "dog" is given to all. In other words, by dint of hearing the same term applied so diversely, he abstracts that which forms the common element in dogs (the dog-nature), and uses that common element (which is an abstraction) as the mark to distinguish the objects to which the name "dog" should be given.

174. Not that the child can yet account to himself for this mental process, or that he has formed any just conception of the distinctive note of dogs. His mind has worked to that point without his reflecting upon it, and has formed a conception of some kind of what distinguishes the species dog from other species of animals, or at least of that which he believes to be the distinction between them.

The mistakes he may have fallen into regarding the distinctive note of the dog in no way affect the truth of what we have been saying, nor alter the fact that he has really gone through the mental process of abstraction, although the element he has abstracted does not exist, or exists only in his imagination, or is not the element which constitutes the nature of the dog. Indeed, the child never begins by abstracting precisely the element to which, by common usage, the word is affixed, but always abstracts a yet more common or generic element.¹

¹ It is said that Prince Lee Boo of the Pelew Islands, having come to Macao and seen a horse, immediately called it a dog, an animal already known to him. This fact demonstrates that he comprehended horses in the species dog,—i.e. that he attributed the term dog to several species, to a whole genus. His mistake must have been quickly corrected, whether by himself through attending to the immense differences between dogs and horses, and thus seeing that, for the convenience of

The child corrects the mistake he has fallen into, when the discovery of new differences between things makes him perceive that he has given to a word a wider meaning than other people: he then restricts the meaning, at the same time restricting the abstraction he had expressed by it, and thus determining its characteristic or abstract element more precisely, reducing it from the general to the specific, or from a larger to a smaller genus.

175. We must, therefore, assure ourselves that the child has arrived in the use of words at recognizing that there is an element common to several things, and that he adopts that element, whatever it be, as the sign by which the things to which the word is applicable are distinguished. Then only can he be said to have performed the first process of abstraction, which forms the cognitions of the second order.

speech, it was necessary to invent two names as signs of these two species, instead of having one name which was only the sign of a genus; or whether (which was the easier way) this reflection was suggested to him by others, teaching him that they reserved the word dog to signify one species, and horse to signify another, and the name quadruped, or a similar one, to signify the genus. A similar error of excessive abstraction is that pointed out by Cook, and referred to by me in the New Essay, n. 155. Now this same fact observed in savages is observable also in children when learning to speak. They always err by attributing to words too general a meaning, because their minds are naturally more inclined to the general than the specific. "I have seen," says Mad. Necker de Saussure, "a child who called all fruit - plums. cherries, currants, grapes, etc. - alike apricots; another gave the same name to two little girls dressed alike." (De l'Education Progressire, L. II. c. vi.) I have observed the same thing in a little girl, and referred to it in the Restoration of Philosophy, etc., B. II. c. xxxi. Some think they can explain this fact by attributing it to the poverty of language in the child and the savage; and undoubtedly it does spring from poverty of language. But why should this poverty determine the mind to attribute to known words a generic signification rather than to invent a new word, or at least to acknowledge ignorance of the name of that new thing? Why does the mind tend to believe that, with the few words it possesses, it can signify all things, instead of taking them rather as words expressing a few individual, or at any rate, specific things? Does not this fact make it clear that it is the natural tendency of the mind which leads it to put into the meaning of words the widest generic conception it can? Certainly it could not see in them a very general conception if the multitude of words forced upon it the multitude of specific differences in things. The mental processes, then, of those who have a poor vocabulary, show that in man the indeterminate and general precedes the less general and better determined.

If several horses are present, and he gives to them all the name *horse*, it is certain that he has arrived at this abstraction, for he cannot take the one animal for the other.

If he gives the same name to things superficially presented to him, but which are utterly unlike, it is equally certain that his mind has arrived at abstracting; for it is not possible that he should take one of them for the other, and believe those different things to be one and the same thing: he recognizes, then, the plurality of individuals, and yet the identity of some one thing in all which induces him to give them the same name.

In the same way, the plural names given to things show that his mind has arrived at the process of abstraction.¹

- 176. In that wonderful operation, then, to which the mind is impelled by its need of understanding, and in which it is assisted by the contemporaneous sound of the word "dog," for instance, and the presence of dogs, and by the action of the speakers, the child proceeds as follows:—
- (1) In the multitude of imaginal ideas which he has formed in seeing and hearing so many and such different dogs, subject to so many modifications (each different dog corresponding to an imaginal idea), he altogether neglects the differ-

¹ Reid also gives it as a sign by which to recognize that the child has arrived at forming abstractions when it speaks of having two brothers or two sisters. "From the instant," he says, "that it uses the plural, it must have general ideas, since no individual has a plural." (Essay on the Intellectual Powers of Man, c. v.) These latter words prove that Reid did not understand the real cause of the phenomenon, and that he confounds the collective with the abstract. The individual cannot be collective, cannot be plural; but may be abstract, may be universal. When I say man or a man, I speak of an abstract and universal individual. My reason, then, for adducing the use of the plural, as a sign that the child has arrived at abstraction, differs from Reid's. I hold that the use of the plural, by one who expresses and understands it, is a sign of the power of abstraction, not because he expresses by it a collection of individuals, but because it includes the observation that the one individual is not the other individual, and yet that the same name is suitable to both, which is as much as to say that it expresses a common characteristic. Hence those who differ from the Scotch philosopher on this point leave my view un touched.

ences, and concentrates his attention on the likeness common to them all.

- (2) This common element having become the exclusive object of his thought, he uses it as a sign by which to recognize the object he has to remember every time he hears the word "dog." 1
- 177. And let it be noted that he does not connect the sound dog with that element only, but with all the objects in which he recognizes that element.

That element has been abstracted in the child's mind, but is not yet named. The word dog does not indicate only that abstraction, but includes all the objects in which that abstraction resides: it cannot be understood unless the mind has formed the abstraction which it presupposes and by which it is determined, and yet "dog" is not an abstract but a common name.

Hence it appears that abstractions assume two forms in the mind,—the one unnamed, which is the foundation of the common name; the other named by means of abstract names. To use the word white substantively is to use a common

1 I have again and again affirmed that the attention of the human mind, which does not act of itself, but only when excited from without, would never fix itself on an abstract quality of objects without the help of words, which the child gets from the society in the midst of which he lives. It follows that man could not have invented that part of language which expresses abstractions, - by far the larger part of it and very nearly the whole. I have supported this assertion by arguments which I believe to be irrefutable. But the experiments I have made on children have furnished me with a new one, and these experiments are corroborated by a mother who is also a sagacious and diligent observer. I mean Mad. Necker de Saussure. She attests the following most true observation: "As it is too often said that languages have sprung from wants, and are only perfected cries, I am in a position to certify that, at least as regards children, this is not the case. I will add that the child does not invent words, but only repeats, as best he can, those he hears spoken. Neither does he call an animal to him by his cries, unless the example has been set to him. Hence spoken language, in its most unformed stage, is the result of imitation and teaching, and always seems to have something of a foreign origin." (L'Education Progressive, T. I., L. II. c. ii.) This single observation made on the child disposes of all the romances of Bonnet, Condillac, Soave, and others, relating the imaginary story of the two infants lost in a forest and composing a language.

name, because the substantive white means only "a white object": the whiteness is united to the object; but the mind has the abstract idea of whiteness, and uses it to understand the word white. To say whiteness is to use an abstract name expressing only that precise quality of the object considered by itself, and having no reference to the object in which whiteness is seen.

The term white is, therefore, earlier understood by the child than whiteness, although he learns to understand the second very soon after the first. But before he can understand the second his mind must have gone through another process. In the term white, an abstraction has been made: but it is united to the object (although always abstracted from it); in the term whiteness, the abstraction is entirely divided from the object, and has itself become a mental object directly expressed by the word. When we say white, we express an object which, besides whiteness, has other qualities, to which we are not giving special attention, but which we know to be there generally, and which must be there for the object to subsist; when we say whiteness, that single quality excludes every other thought from the mind. ness, then, expresses a mode of abstraction more complete than the substantive white.

178. The abstraction may be of an accidental quality in a thing, such as whiteness; or it may be of the substance of the thing, such as body. Sometimes the abstract term is wanting in a language, and only the common name exists; as, for instance, we have the term dog, but not that of dogness. The want of these abstract terms proves that they are of later date than common names.

There are other proofs to show that abstract terms were invented later than common names, such as that supplied by etymology; in fact, every abstract term seems derived from a common one, as whiteness, for instance, from white.

To first mostless payors of white we are differently it the most motions writtens. The animone there are a sin expert reflection of the terries of mental terrinoment in Their Times, and we hav directly niter the latter from the former. The ancient mental vitters. He he week milioopmes and specially Pate. He the common terms is a substantive to express the nestruct, they are the like, he make the past. the percentitud the main. Mr. in therees, militaries, sestion. pendy, witness, Se. It is evident that the former were first in use, and that, as mental power leveloped and the need was felt of expressing the contract apart from any concrete, national of inventing new words the old ones were adapted to the purpose: according to the constant aw that, an nationa advance in mental development and their primitive languages sease to suffice for their wants. before coming new words, they set themselves to after and extend the meaning of the old ones.

\$ 2. - First classification of sensible things.

179. When the child, then, has formed to himself an abstraction, he has laid the basis of a classification to which he can refer objects. Thus, for example, when he has formed

This mode of expression reveals the mental condition of a people who having arrived at shelf-setting the common element in things and inventing common names, have begun to feel the want of a name expressing directly accurately the shelf-settle. The first step to this end is that of adapting the common name in an abstract tent, as, for instance, Souchum for Saucting. Afterwards they take

¹ These names are used as the titles of several of Plato's Dinlogous.

I fatin literature exhibits a people more advanced in the use of language, by the more frequent use of abstract terms. The word paleratude, for example, is frequently used by Clears where Plato only uses the beautiful, re-case. The Latins, on the contrary, use the word paleram, with great propriety reserving it almost exclusively for the entence paleram est, which always refers to a particular thing, us, for example, Cut paleram fait in medion downize dies. Horat, Bk. L. Ep. II., v. 99. It may be observed that in the Holy Scriptures, to indicate the abstract in Behrew, the plural of the common name is used.—for instance. Spiritus Deorum (Familel iv. 15) for the Divine Spirit: the Holy, or the Holy of Holies (Ps. cl. 1, Lev. 19v. 18), ... that is, the holy things,—to express holiness.

the idea of that which is common to all the objects called dogs, on seeing one of these objects he immediately refers it to the class dog. Before making the abstraction he could not have made the classification.

Classification, then, is a mental process which follows upon abstraction, on which it is founded, and therefore belongs to a higher order of cognitions than the second, of which we are speaking, to which belongs only abstraction.

180. But if we look more closely into the matter we shall find that there are certain primary classifications which are made simultaneously with the abstractions, and by one and the same act of the mind. They are not distinct, but implicit. When the mind perceives, through the repetition of the word dog, that there is a common element in all the different dogs seen, it accomplishes two things,—(1) It observes the common element in all these objects; and, (2) It abstracts it, using it as the sign of that class of objects named dogs. To recognize this common element in several objects is, in fact, itself a classification, which is completed by assigning to them a common name.

However true, then, it may be that the man who has formed abstractions, when he sees a new object and refers it

a second step, and, seeing that the common name Sanctum does not adequately express the abstraction holiness, - because, as a common name, it only indicates one holy thing at a time, while the abstract (holiness) is a single element existing identically in many things, - they strive to express that abstract which they find equally in many things, by using for it the common name made plural, as in Sancta, Sancta Sanctorum. The common name is founded on an abstract of action, or referring to action, - for example, the moving, the stable; hence, when they passed on to express the abstract as one word, such common names were changed into the infinitives of verbs expressing the abstract action or passion of things. These infinitives were, later on, used to signify the abstract itself, not as an act, but, so to speak, as a state. For instance, the infinitive אָמָר, which signifies firmum esse, is used also to express firmness, firmitas. And not only in Greek is the infinitive continually used in the form of a noun (and in fact it is a noun), but in Italian it is in common and very frequent use, which it was not among the Latins, as, for example, l'essere, il far delle cose, l'andare, il venire, etc. (the being, the doing of things, the going, the coming).

We find another proof of what we are affirming in the most ancient writers. The language they use is an exact reflection of the degree of mental development in their times, and we may directly infer the latter from the former. cient Oriental writers, like the Greek philosophers, and specially Plato, use the common name as a substantive to express the abstract: they say the like, the unlike, the just, the beautiful, the holy, etc., for likeness, unlikeness, justice, beauty, holiness, etc. 1 It is evident that the former were first in use, and that, as mental power developed and the need was felt of expressing the abstract apart from any concrete, instead of inventing new words the old ones were adapted to the purpose; according to the constant law that, as nations advance in mental development and their primitive languages cease to suffice for their wants, before coining new words, they set themselves to alter and extend the meaning of the old ones.2

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¹ These names are used as the titles of several of Plato's Dialogues.

² Latin literature exhibits a people more advanced in the use of language, by the more frequent use of abstract terms. The word pulcritudo, for example, is frequently used by Cicero where Plato only uses the beautiful, τὸ καλόν. The Latins, on the contrary, use the word pulcrum, with great propriety reserving it almost exclusively for the sentence pulcrum est, which always refers to a particular thing, as, for example, Cui pulcrum fuit in medios dormire dies (Horat, Bk. I., Ep. II., v. 30). It may be observed that in the Holy Scriptures, to indicate the abstract in Hebrew, the plural of the common name is used,—for instance, Spiritus Deorum (Daniel iv. 15) for the Divine Spirit; the Holy, or the Holy of Holies (Ps. cl. 1, Lev. xiv. 13),—that is, the holy things,—to express holiness.

a trifler. This is why children so easily understand the word "God" as signifying a Supreme Being, the cause of all, and give their assent so readily when his existence is affirmed.

182. And this ready assent by children is not to be taken as a gratuitous belief in the word of those who make the affirmation. They do not, in this case, believe blindly: they see. If it were otherwise, they would at least wonder greatly at the conception of God, when the attempt was made to impress it upon them; nor would it find that easy and natural acceptance with them which causes them, so soon as they are able to conceive it, to believe that God exists.

Yet without language children could not perceive this Divine existence. God being invisible, they could not fix the conception of him without a word to arrest their attention upon it.

But what is the knowledge of God in children? It is both a conception and a belief: I say belief, to distinguish it from perception. When man judges that a thing exists, because he feels its action upon himself, he has the perception of it. When he judges that a thing exists without feeling its action on himself, but on certain grounds of reason, he believes in it.

CHAPTER III.

DEVELOPMENT OF THE ACTIVE FACULTIES IN THE THIRD PERIOD OF CHILDHOOD.

183. To the passive faculties correspond an equal number of active faculties.¹

When, therefore, we have accurately defined the nature and extent of the development of the senses and intelligence

1 Anthropology, No. 48.

during a given period of the child's life, we can infer the nature and extent of instinct and will in the same period.

Important as it is to know the degree of development of the passive faculties, in order to measure and adapt to it the instruction to be given to the child, still more important is it to know the degree of development of the active faculties; for without this knowledge we shall be powerless to adapt and guide his practical education, in which we can make use only of those activities which have already been awakened and set in motion within him.¹

- 184. Now, in this third period of life, the child, through the means of language, of wants and instincts newly awakened in consequence of his development through the two previous periods,—
- (1) Adds immensely to his stock of perceptions, memories of perceptions, and imaginal ideas. To this corresponds an equal development of his instincts and affective and appreciative volitions.
- (2) At all ages, man can conceive absent things. This causes the passion of desire. It is true that, even as regards present things, we may feel the desire to enjoy them, if they are good; but it seems to me probable that the desire to enjoy things that are present comes very late to man,—appetite and natural instinct, which inclines the animal to them, supplying its place. The memory of past perception is not properly a conception of absent objects, and primitively can excite only a certain feeling of annoyance that the perception is past, but not a desire, because such a feeling alone would not awaken the thought that the perception could be renewed; whereas, on the contrary, if the thought of a pleasurable absent object is excited, it is immediately

¹ On the manner in which human activity gradually awakens and becomes effective, something has been said in the work entitled La Società e il suo fine, "Society and its End," B. IV. vi.

followed by a spontaneous action of the will desiring it. The third period of childhood is, then, marked by the birth of desire.

(3) But a greater activity of the will is excited in virtue of the earliest abstractions. As the understanding fixes its attention exclusively on an element common to several objects, so, if this element is pleasant, the will desires it; if it be unpleasant, it abhors it. Now, the difference is immense between the volitions which have for their object an actually existing individual, such as it is, or even a full-species of individuals, and the volitions the object of which is an element common to many individuals, an abstraction. first case, the will loves an object which is good (bonum); in the second, it loves that which makes the objects good (rationem boni), the goodness in them. The volitions which have for their term only a determinate object which is good are satisfied by its possession, and therefore their effective action quickly ceases. On the contrary, the volitions which have for their term a common element, which gives their goodness to that kind of objects, do not find their satisfaction in this term, which is an abstraction incapable of appeasing them, but use this abstraction, which was their first term, as a sign by which to recognize what objects are good, and to discern them from the bad. Here, then, the activity of the will finds an immense field for its development, because this element of goodness which it desires is realized in an infinity of objects which man, arrived at this point, goes incessantly in search of. Hence it is that, as I have shown elsewhere, the faculty of abstraction is that which furnishes man with the rules by which he discerns and finds that which is good.2

¹ This full-species is, as we have said, that which is founded on a completely sefinite conception, or one that answers to an imaginal idea.

² See La Società e il suo fine, "Society and its End," B. IV. c. xxiii.

(4) Among the earliest abstractions, we find quantity in sensible objects, whether as continuous or intensive. It is by means of this abstraction that the child discerns the greater from the less, 1—that, for example, which gives him more, from that which gives him less, pleasure.

This cognizance of the quantity of things awakens in him a new class of volitions,—i. e. the appreciative volitions,² and the power of choice which begins at that age.³

- (5) Another of the primary abstractions made by the child from things, and most important to his development, is that of animated being (animalità).
- ¹ Even the sensual instinct acts as if it could discern the more and the less; but, when an animal seizes the larger of two morsels of food, or the one it likes best, it is not because it discerns the greater from the less, but by a law of its own nature, the effects of which resemble those of intelligence, as we have explained at length in the Anthropology, No. 430 and foll.
 - 2 See the Anthropology, No. 619.
- 3 As regards discrete quantity, I believe that the child, arrived only at the second order of cognitions, cannot count beyond two, because to combine two objects is already a reflection, and to put together three presupposes the reflection that first combined the two, so that each addition of a unity seems to be a reflection on the preceding additions. It may be objected to this opinion of mine, that the senses themselves present many objects simultaneously to the child, and therefore that his intelligence grasps them at one glance. But this fact, however true, does not seem to me sufficient to enable him to number the objects, or to form true collections of them, because the human mind does not form a collection until it has, 1st. Perceived each object; 2d. Distinguished the one from the other; 3d. Compared them together, joined them by some word. This is not done by sense, which only feels several things, but does not know that they are several. It is always of the utmost importance to distinguish carefully feeling from knowing. With regard to my classing the knowledge of continuous quantity under the second order of cognitions, it might be objected that man does not, in his earliest perceptions, affirm more than the entity (entità) of the thing; its mode of existence is only felt by him (No. 109-112). It is, then, by a second act that the mind perceives the absolute quantity of a body, and by a third that it compares the absolute quantity of two bodies and finds their relative quantity, - that is, the greater and the less, which are words expressing relations. I confess that this difficulty requires consideration. Nevertheless, it has not induced me to change my view of the perceptions of great and small, as belonging to the second order of cognitions, because the perception of absolute quality, although posterior to the earliest perceptions, and an advance upon them, is still only a perception, and therefore does not exceed the first order of cognitions. To know that one object is large and another small presupposes only the confrontation of two objects at once, and two objects can thus be confronted, as we have said, by the second grade of cognitions.

If he could reflect on his own feelings and thoughts, he would have an immediate perception of his own soul, which would be a cognition of the first order, and therefore more elementary than that which he has of soul as the cause of motion in animated beings. But, although the soul-feeling (l'anima-sentimento) is the object of a cognition of the first order, such a cognition is as yet beyond the child, because the stimulus is wanting to draw his attention to his own feelings and arrest it there. His attention is like a child always running away from home; the objects of his wants and his external sensations, amongst which are the sounds of words, draw it from within to the world without.

Nor would he arrive at arguing, from motion in animals, to the existence of a principle of motion in the animal, if language did not teach him to attend to a part instead of the whole of a thing, and from the complex to abstract its element. Thus, in the animal, he can think, by means of language, the character of mobility, and make the abstraction animate being, or the animal. This is what enables him to distinguish not only a great and a little in things, but also a difference of dignity; he can already, in his practical judgment, estimate animate objects higher than inanimate, and prefer the former to the latter, as the greater entities.

(6) Finally, the cognition of the existence of God, as complement of the entities, exalts the activity of his feelings to the most sublime of objects, and places him already in communication with Heaven.

CHAPTER IV.

OF THE TEACHING CORRESPONDING TO THE SECOND ORDER OF COGNITIONS.

ARTICLE I.

FOUR ERRORS TO BE AVOIDED BY TEACHERS.

185. To the child, every new idea is a joy: his intelligence rushes in at every door opened to it. As the first act of intelligence parts the lips of the infant with a smile, so its delight in the sound of the mother's words shows itself by exulting motions; and, as soon as it can itself pronounce words, the difficulty is to keep it silent. It is going against nature to deprive the child of the use of speech, which is equivalent to him to the newly acquired use of his intelligence, the best part of himself. The teacher should avail himself of this innate and noblest impulse, not repressing it, — which is an offence against the divine light shining in the human soul, — but wisely employing and guiding it. This, however, is a most difficult art.

186. The errors made in this direction may be reduced to four:—

- (1) Sometimes the intellectual activity of the child becomes annoying and troublesome, and an attempt is made to repress it by authority, refusing it sufficient food.
- (2) Sometimes the material memory of the child is burdened, while his intelligence is left to starve, which is not only a most serious injury to the little, intelligent creature, who craves only to understand, but also cruel and inhuman.
- (3) Sometimes the intelligence is given food not adapted to it; in other words, it is called upon to perform acts of a higher order than it has yet attained to, in which case, to understand anything beyond mere words is an absolute

impossibility. Sometimes the cognitions required of it are not beyond its powers, but the intellectual attention lacks the necessary stimulus to make the effort to attain them.

(4) Finally, even when all the cognitions required of the childish intelligence are proposed to it in their due order, and accompanied by the appropriate stimuli, there is failure, because the teacher passes from one thing to another, without having assured himself that the first thing was duly understood, and that the child is really following the successive steps of the teaching; in other words, he does not give the child time to take in the matter, to master it, and to recover from the kind of surprise which every new idea produces in him.

The preceding observations should be borne in mind at the beginning of each of the following chapters, in which we shall treat of the teaching of children at the several periods, or rather at each of the successive periods of their childhood, as marked by each order of cognitions. But how easy it is to forget them!

ARTICLE II.

THE GAIN TO THE MIND FROM THE REGULARITY WITH WHICH PERCEPTIONS
AND IMAGINAL IDEAS HAVE BEEN IMPARTED IN THE PRECEDING PERIOD.

187. We come now to the teaching which should be given to the child as corresponding with the second grade of cognitions. But let us first note that the child does not, at that age, reap all the fruit which will follow from that orderly presentation to the mind of perceptions and cognitions recommended by us (Nos. 178–181). Yet some good result is obtained both on the mind and life of the child, though it is difficult to trace it.

In man there is a *subjective unity*, — that is, an ultimate unity of feeling. Thus, every sensation, perception, or idea

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period of which we are treating should express cognitions of the first and second order, but no more.

Language, the nature of which is to express all degrees of cognition, is the most fitting instrument for the development of intelligence at every period of human life; but one portion of it only is suited and proportioned to the third period, and that alone should be used with the child at this time, because that alone can be intelligible to him, and anything more would simply load his memory, while leaving his understanding vacant and sterile. This would be to commit the third and fourth errors pointed out above.

Let the child, then, learn to name his own perceptions, and the abstractions which are derived immediately from sensible objects, absent things, those which are invisible, and the conceptions he has derived from his faculty of integration.

190. It is certain that from this period the child can learn two or three languages by ear, without any great effort. If this is done by making his mother tongue the principal one, and using what he learns of the others as equivalents superadded to it, the exercise in these languages will be a gain of time, a step in advance made by the child.¹

SECTION 3. - Double practice in language, - the natural and artificial.

191. Language should be taught to children by both a natural and artificial practice of it.

In the natural practice, every part of speech may be used,

¹ The authoress of L'Essai sur l'Education de l'Enfance gives the same advice. "Les enfants," she says, "peuvent sans inconvénient apprendre simultanément deux ou trois langues, surtout quand ils sont entourés dès l'origine de personnes qui en font usage avec eux. Cela se pratique avec succès chez les peuples du nord, où les enfants parlent dès le berceau plusieurs idiomes différents. Ce moyen, le seul praticable dans la première enfance, n'offre pas, il est vrai, l'avantage de former l'esprit comme une étude faite par principes; mais rien ne s'oppose à ce que l'enfant entreprenne un peu plus tard ce dernier genre de travail, qui lui sera rendu plus facile alors par les connaissances qu'il aura déja acquisses. D'ailleurs si une lacune a lieu à cet égard, on peut y supplier par l'étude approfondie de la

— not one being above the second stage of human intelligence, with the exception of certain of the conjunctions, — because all may be used to express feelings, perceptions, abstractions of the first degree, and the moods of the mind.

Feelings are expressed by interjections, which are not, properly speaking, signs.

Perceptions are expressed by proper names, by adverbs of time and place, by the personal pronouns *I*, thou, etc.; and demonstrative pronouns, this, that, etc. Abstractions are expressed by all other nouns, by the infinitive of verbs, by participles, and by certain conjunctions.

The moods of the mind are indicated by the inflections of verbs, by prepositions, and by certain conjunctions.

- 192. The natural practice of language should follow these rules:—
- (1) Nothing should be said to the child which goes beyond the stage of development his intelligence has arrived at.
- (2) He should hear only the best language, well-chosen and accurate words, a refined accent, and, above all, correct pronunciation.
- (3) The persons who speak to children should convey to them, by tone and manner, the sense of moral elevation. Were this done, the children would gain immensely in time; for not only would their intelligence be more rapidly developed, but the foundations of moral good results would be laid at the same time.
 - 193. In Italy, precious time is lost by our having to un-

langue maternelle, de toutes la plus essentielle à savoir bien et à parler correctement." The facility with which children learning two languages at once avoid confusing them is a singular fact, which, however, is to be explained by means of the unitive force springing from the perfect unity of the subject. Mad. Necker says, admirably as usual: "Sounds are linked together and come back to our minds like images; thus, one word recalling all the other words which accompanied it, the different idioms are not mixed up by children in their talk. The danger of any confusion will be more easily avoided if the same person always speaks to the child the same language. The idea of the person being then connected with a certain mode of speech, the child will use the same in answering." (De l'Education Progressive, L. II. c. vi.)

learn at school the dialect we learned at home; and, even after having done this, we do not learn to speak good Italian, partly because we cannot rid ourselves of the lower vernacular familiar to us from childhood, and partly because our masters themselves, to whom pure Italian is an acquired art and a dialect is natural, cannot give us what they have not got. Correct pronunciation alone takes a very long time to learn; and yet we might have it living in our ears, if we had been accustomed from infancy to hear the double letters properly sounded by those around us.

By language we form our ideas, and the perfection of language is the perfection of thought.

Moreover, whatever brings us order and propriety, and assists us to think with ease and correctness, tends to moral training of a most precious kind.

Finally, how great would be the advantage to this beautiful region, if Italy came to have only one speech! How many divisions amongst her people would not that alone cause to disappear! How far greater would be our sense of brotherhood! How would the love of our common country increase!

These things make me marvel that in our great families, where the children are to be given the best education, care is not taken to make them imbibe, as it were with mother's milk, a pure and refined speech, and their infant ears be allowed to hear only good things spoken in good language.

§ 4.—Continuation.—Artificial practice.

194. This should be the privilege of the rich: not to disdain for their children the use of public schools, but to send them there better trained, more developed, than others, and already in possession of the language the latter have to

¹ The unity of Italy under one monarchy is rapidly realizing Rosmini's patriotic wish. A common country necessitates a common language.—Note of the Translator.

labor at learning. How justly, then, would the wisdom of the parents, joined to their means, obtain the first place in the schools for their children! And the latter would have time to spare to learn a multitude of useful things which would enable them to hold their vantage-ground in relation to their school-fellows.

A word as to the artificial exercise of speech for children: it should, at that age, besides correcting the child whenever he uses a wrong expression, consist solely in giving him, as much as possible, the *materials* of speech. The *forms* he is not yet competent to learn, for the *forms* of speech, that is, grammar, require an order of cognitions far above the second.

195. But as to the material, he must be taught to name everything accurately; first those things nearest to him, then the more distant. He will thus acquire an ample vocabulary, and thereby great ease and propriety of speech, which is as much as to say, of thought, and in time also of writing.

The "Manual of Preparatory Schools" and other books composed for this purpose will be found very useful towards it.

This is the time for exercising the child in distinguishing by their names all the things that fall under his senses. Names (nouns) constitute the fundamental part of language, and the exercises must not include verbs, except their infinitives and participles, which are truly nouns, the former signifying actions, the latter agents.¹

1 "Il est vrai," says Mad. Necker, "que plusieurs mots qui sont des verbes pour nous n'en sont pas toujours pour eux; ainsi à boire, c'est de l'eau ou du lait; promener, c'est le plein air ou la porte. Mais quand ils commencent à vouloir qu'on agisse en conséquence de ces mots, l'action prend de plus en plus de la consistance dans leur esprit et ils finissent par y attacher véritablement un signe." — De l'Education Progressive, L. II. c. VI. The more ancient a language is the more it abounds in infinitives and participles which replace many other forms of verbs. For example, in Hebrew, the third person of the perfect tense is no other than

196. This is the fitting place to say something of the order which the mind of the child should be induced to follow in abstraction.

There are many unnamed abstractions. To these the child's attention should not be directed because it cannot be assisted by words, and the fact that they have no names is a manifest sign that mankind have not felt the want of naming them, as it is also a sign that they are not among the things which fall under our observation.

But there are several kinds of abstractions among those that are named: some are abstractions from abstractions; these are beyond the child's intelligence, which has reached only the primary abstractions: he could never understand the meaning of the words law, justice, etc. The abstractions he can understand are those only which are supplied by sensible things. But even these have various common names indicating various degrees of abstraction. The most common names indicate things by the element common to the largest number of objects, and the less common names indicate the same things by an element common to fewer objects. The latter, therefore, express a higher degree of abstraction than the former. For instance, if I want to name a horse, I may name him in three different ways, saying, "that thing," "that animal," "that horse." I use three names which can be equally well applied to the object; but when I call it thing, I give it a name common to a larger number of objects than when I call it animal; and in using the latter I apply a name more common than that of horse.

the infinitive of the verb, as קָּבַּה, inspicere, is used to signify respexit. In the same way, the participle, with the verb to be understood, takes the place of other forms. In Kings iii. 15, where the Vulgate translates ministrabat, the Hebrew says המשָרה, ministraus, or was ministering. And, in fact, in the scale of cognitions, the noun stands lower than the verb; hence the infinitive and the participle which are really nouns must necessarily abound in primitive languages, when the intelligence of men is in its earliest stage of development, and the other verbal forms requiring greater abstraction come later into use.

And yet the name horse is still a common and not a proper name: it indicates an abstraction which is founded on the abstract species, under which there is another or several others (the full imperfect species) not named before we come to proper names, such as Rondello, Vigliantino, Brigliadoro.

197. Now let us inquire whether, in the artificial exercise of speech imposed on the child, it is most in accordance with the order of nature to make him name things by the most common names, and afterwards by the less common, or vice versa.

On this point we have already given our opinion (45–50) and will here only support and explain it by some further observations. But first let it be noted that we are not now speaking of the natural exercise of speech, in which the only order to be followed is that of the wants which circumstances require to be expressed. Secondly, it must be remembered that the more common the name is, and therefore the more general the idea it expresses, the easier it is for the child to learn.

To convince ourselves of this, we need only observe how children and the vulgar, that is, the least developed classes of mankind, always give to objects the widest common name, such as this thing, that thing, etc., instead of this plaything, that cart, that jacket, etc. In the ancient languages, the use of generic rather than specific terms is more frequent than with us, precisely because the ancient world was less developed than the modern. Observe in the Latin,

¹ Although objects are never called by a name indicating their full imperfect species, which embraces all accidental qualities, yet they occasionally receive names which partly indicate the abstract species and partly accidents. Thus the names given to horses, such as bay, chestnut, dapple, roan, black, sorrel, piebald, from the color of their coats, are names given to a species not wholly abstract, but distinguished by some accidental quality; the word roan, for instance, standing between the name horse (abstract species) and Rondello, the proper name of an existing individual. There are an infinite number of these specific denominations, and they are true common names, partly universal and partly also abstract.

for instance, the use made of the word res: it was applied to everything:

Another observation leads us to the same conclusion. Why is purity of style so rare and so highly valued, but because it is so difficult to name things by the words signifying the more limited species, which are habitually named loosely under generic terms.

198. It will, perhaps, be said that children find it easier to learn and apply the more general common names because they apply to a larger number of objects, and are, therefore, more frequently heard. But the question still remains, why adults themselves should make such frequent use of generic names if it were easier for them to use the specific ones, which certainly are more appropriate, and help correctness of language.

It is certain, then, that the more ideas are general the more congenial and familiar they are to the human mind, provided they express only immediate abstractions, that is, such as denote a common element in the sensible things perceived by us. The case would be changed if the abstractions were such as are formed by an action of the mind on previous abstractions, and which we have termed abstractions from abstractions.²

It is, then, of the greatest advantage to the child to prac-

¹ Torcellini says on the word res: Vox est immensa prope usus ad omnia significanda, que fleri, dici, aut cogitari possunt. These observations are, in fact, a fresh proof of the faults of our philosophical system: thing, or res, is a word equivalent (with little difference) to entity, being. The words which are most frequently used show that the ideas they express are the most familiar and natural to man. This would be impossible as regards the idea of entity, the most abstract of all, if it had to be formed by dint of successive abstractions, instead of springing into life simultaneously with the human mind itself.

² If this important distinction is attended to, we shall not be accused of contradicting ourselves when we assert that the first of the natural-moral laws apprehended by the mind assume a specific form, and only later a more generic and universal one. See Trattato della Coscienza Morale ("Treatise on the Moral Conscience"), Nos. 150-156.

tise him in passing from the more general names of things to the less general. When he has gone through this process repeatedly with many different kinds of things, his ideas will be arranged in their right order; he will have laid in the fittest material for subsequent reflection, and his mind becomes accurate and logical.

199. But besides observing the rules given above, there are certain others, of which the following is an example: The educator should have a table drawn up of the classes more or less extensive into which all the things conceived can be divided. This should be the foundation of his logic. Here is such a table:

In the exercises above mentioned should be included

¹ This scheme has the form proper to the cognitions having individuals for their object (the real, universal, and abstracted). By the side of this there should be another having the form proper to cognitions which have for their object the abstractions themselves. This second form has the same subdivisions except the subsisting, which is altogether wanting; but the word entity should take the place of being, and the same in all the other conceptions included in the scheme.

neither the names signifying the elementary ideas of being (though amongst the easiest), nor those indicating categories, or denoting mental or nominal genera, but solely the words signifying the universal, the real genera, the abstract and semi-abstract species, and also the subsisting (proper names).

200. Now, as the semi-abstract species may be innumerable, we have still to find the rule by which to choose those best suited to the child. Here there can be no doubt that the right rule is to choose those in which he will be most interested, and he is most interested in those which are most closely related to his wants and instincts, and which soonest and most vividly strike his external senses.

The educator, therefore, must examine with subtle insight the development of these wants and instincts in the child, and the order and vividness of his sensations, in order to discover which are the accidental qualities in things which most interest him, and thus lead him on by this natural gradation to recognize in each thing the semi-abstract species.

Moreover, we must remember that these semi-abstractions should not be formed from the things themselves, but from the conceptions of things as formed in the child's own mind; otherwise he will understand nothing. Now the conceptions the child forms to himself of things are in themselves accurate (he makes mistakes only in the words he applies to them), but imperfect, and therefore they are continually being altered and corrected. For example: the child forms his conceptions of a plant from seeing it growing in the ground, from its green color, from the common form of plants, from the cool, damp feeling of the leaves, etc. This is not and cannot be expected to be the conception of the philosopher; but it is this childish conception, or rather this conception proper to the age in which it is formed, that we should start from, and connect with it the classification of

plants. The specific abstraction of a plant in the minds of our little pupil will then be "that which is planted in the ground and grows."

The specific abstraction of the plant itself will, on the other hand, be to the mind of the philosopher "an organized body without senses or contractility, which develops from a germ, absorbing and assimilating, under given favorable external conditions, molecules of a different kind." The classification of plants to which the child's mind should be led must in no case rest upon this definition, which the child could not understand, but must be constructed on the conception proper to his degree of intelligence.

Hence it would be a blunder to classify plants for him by seeding and germination. He does not want a classification of that which germinates, but of that which is planted in the ground and grows.

201. Moreover, the abstract qualities on which the various classes are founded must be such as do not exceed the degree of intelligence the child's mind has attained, and they should also furnish the stimulus which shall rouse and attract his attention; this being the second condition, as we have pointed out, of his understanding what we want to teach. That stimulus is to be found in the sensible characters of the object, and especially the larger and more striking, so that they imprint themselves on his senses, on his imagination, and his memory. These characters, consisting in sensible qualities, bring the full conception (universal, not abstract) nearer to the abstract conception, and thus form the semi-abstractions, as we have called them, which are best adapted to the childish mind.

The whole classification of roses, which we gave as an example (21-34), is founded on these semi-abstractions; in other words, it is an abstraction the ground-idea of which is a specific semi-abstract idea (the specific idea of the rose).

202. Indeed, if we consider all the classifications that can be made of non-sensitive things,—which is as much as to say all physical systems,—we find them founded on a specific abstract idea, that is, the idea of corporeal substance. All the infinite scale of subdivisions of this substance is no other than a scale of semi-abstract ideas, which descends to the first step, the full idea (idea of the universal but not abstract individual), which is the boundary of the ideal world. Wholly outside of that remains the subsistence of things, which constitutes the world of reality.

The conclusion from this is, that the order to be observed in teaching the child the more or less common names of things, must follow the classification which descends from the specific abstract idea, through the semi-abstract ideas, to the actually subsisting.

CHAPTER V.

EDUCATION OF THE ACTIVE FACULTIES IN THE THIRD PERIOD OF CHILDHOOD.

ARTICLE I.

DIFFICULTY OF DETERMINING WHICH SHOULD BE THE NEGATIVE AND WHICH THE POSITIVE PART OF EDUCATION.

203. One of the difficulties which the educator has to solve is to determine which are the things in each of the periods of childhood which the child should do for himself, and which should be done for him by the teacher. Undoubtedly the child's nature acts beneficially, and the educator should respect this action, and beware of interrupting or disturbing it. It is no easy task to discern it and the wisdom of its ends; and it is only the few who feel how religiously it should be respected. We are always wanting to do too much; we form opinions with presumptuous haste; and, strong in our self-confidence, we fancy we can easily

do better than nature, and think with a schoolmaster's rod to teach and improve our great mother.

Nature, working in the child, is forever producing peace, serenity, order, due development of all the faculties. The educator often enough fails in producing these results of which nature has the secret, and by his positive action produces their contraries, *i. e.* agitation, disturbance, disorder, perplexity, confusion in the mental processes which hinder and clash with one another.

- 204. This important consideration supplies us with certain general rules of infant education: here are some which, although I have mentioned them already, can never be too often repeated.
- (1) The child should not be disturbed when it is quiet and contented.
- (2) In order to avoid the chance of irritation, it should be occupied rather with things than persons, for the former are never indiscreet, and do not, by their interference, alter and disturb the child's natural mode of action.
- (3) When it is tired of things, then is the time for persons to come to its assistance.
- (4) The persons who are about the child should be sincerely genial and kind.¹
- (5) They should not excite the child either physically or morally by over-fondling or play; it is better for him to be left to amuse himself, with passive rather than active things.

I am not sure that the rule in English nurseries, of always speaking low to children, is a good one.² The low voice is, of course, less exciting, but it seems to me that it

¹ "Rien n'égale," observes Mad. Necker, "la froideur des enfants pour les démonstrations hypocrites."—L. II. c. iii.

² Note of Translator.—Does such a rule exist? Is it not rather the rule Rosmini himself would lay down, that loud, harsh sounds must be avoided in speaking to infants? He may have gained the idea from the naturally quieter demeanor and lower tone of voice of English people, as compared with Italians.

is an excessive application of the principle that the child should not be startled or shocked, and that it is an attempt to go beyond Nature herself in this matter. On the other hand, I hold it to be of the highest use to observe the following rule: Let the child hear only sweet, well-modulated voices, with a good intonation, and then it will not matter if they be high or low. Its own voice is high-toned by nature; why should it be injured by the high tones of another? It is the harsh, the dry, the false, the discordant, the violent which disturbs, distracts, and irritates it, not the natural, ordinary sounds, high or low. On the contrary, I believe it to be a useful practice for the child, as I said before, to let it hear the whole scale of sounds and their concords in due order.

ARTICLE II.

DIFFICULTY OF DETERMINING HOW MUCH THE TEACHER SHOULD GIVE THE CHILD AND HOW MUCH HE SHOULD REQUIRE FROM HIM.

205. It need scarcely be said that education cannot be altogether negative: the teacher must make it positive in some directions.

In the first place, all but those who choose to flatter human nature must recognize that it is defective, and often enough manifests evil inclinations. The will of man yields, at first, spontaneously to the natural disposition, good or evil, which shows that it also is a mixture of both.

Undoubtedly art must come in to remedy the defects of nature and will; to anticipate them, to keep away temptation and bring about occasions of right action. Divine providence, by ordering that man should be born into a society, made him dependent upon his fellow-creatures, that they might help his weakness, guide his ignorance, correct his wrong tendencies. Education, therefore, must have its positive side: but what does that consist of? How far does it

extend? What is its part at each period of man's life? These are new problems of immense difficulty to be resolved, —problems which in practice will receive infinitely various solutions according to the circumstances of the pupil, which are themselves difficult to know completely and certainly.

206. It may be laid down in general, that the positive portion of intellectual and moral education should be least in the earliest period of infancy, and go on enlarging with each successive period; but what is the law which governs this continual extension? In a word, what are its limits at each period? The answer to these questions must be arrived at by manifold experiments and observations,—which are now, thank Heaven! beginning to be made,—and it is high time that the art of experiment and observation should be applied to education. Meanwhile, we must be content to point out the way,—more than that we frankly confess ourselves unable to do,—and shall begin by laying down a self-evident principle on which our subsequent reasoning will be based.

This self-evident principle is, that we cannot require from the child what is impossible to him, but only what he can do. We must find out, then, what it is he can do at each stage of life: this is the difficult point to determine.

M. Naville admitted that here was the knot of the whole question as regards the education of the child's intellectual faculties; 1 but the case is the same as regards his active and moral faculties. We must always know what we can exact from the will of the child; to require more than this is unfair to him.

^{1 &}quot;Here lies the difficulty: to distinguish accurately what should be given to the child and what demanded from him; and here also lies the merit of the teacher, and the condition of his success. If you teach your pupil what he could find out for himself by a fair expenditure of time and labor, you dull his intellect; if you refuse to give him the facts needful to him, and guidance in using them properly, you hinder his first steps, oblige him to lose time in fruitless efforts, and discourage him."—De l'Education Publique, pp. 106, 107.

207. Now, as regards the understanding, the very object of this work is to determine with precision the gradual processes of the child's mind, so as to know what can be expected of it at each period of childhood. The will follows the steps of the understanding, and it would be manifestly unreasonable to require that the child should will a good or fly from an evil, both of which are as yet unknown to him. Yet this is what educators are very apt to do: they want the child to think as they think, to will as they will, to act as they act; or, rather, they want him to think, will, and act as they see that it is proper to think, will, and act.

The injustice of such teachers arises from their ignorance. They have made for themselves rules of action, and pretend that the child shall observe the same rules. Where this pretension is too obviously absurd, they reduce it only so far as to say that the child has no rule of action because he has not yet arrived at the use of reason. This is going from one extreme to the other. The child, indeed, has not the same rule of action as the adult, and it is gross injustice to require it of him. But it is no less an error to say that he has no rules: he has his own; and our business is to guide him by these, and not by ours. It is true that he appears incapable of understanding our rules, when we put them before him; but to infer from that the absence of any rule of mental action would be a great mistake. fault that we are unacquainted with this rule, - that we have failed to observe and note it. The child, certainly, does not possess rules in any abstract form; but his mind quickly sets them for itself, and it is this process of formation which should be the object of the educator's study, while it is just this which has hitherto been altogether neglected. not even been suspected that such mental rules were formed in the earliest period of infancy.

208. We have already seen that the child, from the earli-

est stage of intelligence, perceives sensitive and intelligent being, as he also perceives the object which is beautiful in his eyes. Here we have the source of the two primordial guides of his mental action, which his affections will follow. He will soon love the sensitive, intelligent being, and admire the beautiful object. His affection and his admiration follow the earliest light of his understanding: the moral action is born immediately of the intellectual one.

It will help us to observe that these two effects of admiration and affection are not so distinct as they seem in the child's mind. In fact, what he really loves is the beautiful; it is this that he admires, and therefore loves it: admiration is that first appreciation which is the cradle of love. I admit that he sees a real difference between his mother's face and the button shining in the light; but that is a real and specific difference only on the supposition we made, that souls interact on each other through the medium of living bodies. On the other hand, we have already seen that the child gives a soul to the shining button and to all other things, and therefore he not only admires but loves it. So true is it that the child loves that which he has first admired; that, in baby language, pretty means equally lovable, and ugly, unlovable. Those two words have a most extensive meaning for infants. This is equally proved by an observation which has been already made, that little children show compassion only towards the things they consider pretty, and that their hearts harden against the things which seem to them ugly.1

209. In the second period, the standards which guide the child's affections assume another form. The words pretty and

^{1 &}quot;Tout ce qui déplaît à l'enfant," says Mad. Necker de Saussure, "endurcit son âme. Quand un animal blessé est joli, on lui voit partager vivement sa souf-france; s'il est laid, il s'en détourné avec horreur. Sa compassion s'évanouit aussitôt que certains défauts, tels que la difformité ou le ridicule, lui font dédaigner de s'associer à l'être souffrant."—L. III. c. vi.

ugly, good and bad, etc., having been continually heard by him, he is no longer affected only by what is pretty and ugly, but already a certain type of goodness and beauty is formed in his mind, and he is moved by this abstraction; by it he understands and loves absent objects which are good and beautiful; he desires and learns to seek them, while exactly the contrary process takes place as regards evil ones.

It is true that this abstract standard, this first type of good, is still closely bound to the object, and at first is no more than the sound of the word associated with various objects, of which his memory retains the perception and the image; but, little by little, it becomes a real semi-abstract idea, i. e. an idea composed of the imaginal ideas of the objects seen. This semi-abstract idea, type of the beautiful and the good, is the nearest to the objects after the imaginal ideas, so that, guided by its standard, the mind has but a step to make to arrive at the objects themselves. Hence the child's affections, under its impulse, retain much of the eagerness and impetuosity of their earliest manifestations. He does not as yet seek by a variety of means to attain the desired object, but springs to grasp it at once.

210. Now this type of good, thus formed by the child so early as the second order of cognitions, and becoming his rule of action, is different in form from the rule supplied to him by Nature herself in the earlier stage of his mental life; but at bottom it is the same. It is the good and the beautiful that the child admires and loves at both periods alike; but in the first, he loves and admires the good and beautiful objects; in the second, he begins to love the good and the

¹ These primitive desires are so violent, that Mad. Necker de Saussure recommends that children should not be allowed to see the preparations for their meals, lest this should excite them too much. Ce sera par conséquent une attention salutaire que d'éviter de les rendre témoins des préparatifs de leurs repas. Le désir aiguisé par la vue de l'objet qui peut l'apaiser, devient chez eux d'une vivacite douloureuse. La certitude que ce désir sera satisfait ne les calme point, et l'expérjence est alors plutôt une peine qu'un plaisir pour eux.—L. II. c. iil.

beautiful in the objects. The good and the beautiful are presented to his mind in a new form; but his will, in both cases, has the same object.

This identical object, this goodness and beauty, on which the affections of the infant are fixed, remains the constant object of human affections throughout the life of man, in the period of his greatest vigor and intellectual development, as in the decline of his faculties in age; and towards it he breathes his last dying sigh, and hopes to attain it in eternity. But if the object remains fundamentally the same, the mode of conceiving it is by no means the same, and thus the acts of the will are modified by the form in which the understanding presents the good and the beautiful.

211. That form changes with each order of cognitions. But, as besides this advance, which consists in passing from one stage of cognition to another, there is also a second progress which takes place within each stage of cognition, and demands no small amount of time, so the type of the good which governs the will retains the force proper to a given order of cognition, while becoming amplified and perfected. The arduous task imposed on the educators of youth, is to follow these mutations of form from one period to another. together with the steps of its development within each period. For it is this type in the child's mind at each stage of its existence which they must make use of to guide its moral And they must demand from it neither more nor less than this: that it shall follow the rule of goodness which nature has formed within it, and not any other. To demand no exercise of virtue from the child is educational indolence arising from ignorance; to demand that he shall be virtuous, according to a standard as vet unknown to him, is a pedantic absurdity, the tyranny of peda-It must entail violence, ill-humor, blind anger in the teacher, which will be the only things his unhappy disciple

will learn of him. It follows that the child must always be considered as a moral being, for such he always is; but, at the same time, the form and nature of his morality at each stage of childhood has to be investigated, and herein lies the secret of child-nature, to be fathomed only by arduous study, by observation and profound meditation.

ARTICLE III.

WHAT IS THE MORAL BULE OF THE CHILD ARRIVED AT THE SECOND ORDER
OF COGNITIONS?

212. Having arrived at the second order of cognitions in the child, we have also pointed out what form his morality can take.

He has an idea of goodness apart from subsistent objects, though one or other of the latter is constantly associated with it. That idea is not only apart from subsistent objects, as are all imaginal ideas, but it is also different from the latter. For imaginal ideas faithfully represent the object as it appears to the senses; but the idea of goodness expresses none of the indifferent or bad parts of the object, but only the element which is good; as the idea of badness, leaving aside the good or indifferent parts, retains only the element which is bad. This idea of goodness or badness, therefore, is not only universal as are all imaginal ideas, but it is in so far abstract, that it fixes attention solely on one determination, on a single quality of the object, apart from all others.

But what is good and what is bad to a child whose development has attained only to the second order of cognitions?

The abstractions through which a child at that stage has arrived at the idea of good and evil can have been derived only from his perceptions of sensible objects and their imaginal ideas: for his mind contains nothing else capable of attracting his attention. Language, also, the instrument

by which he has accomplished the great work of abstracting from the objects perceived, imagined, ideated by him, the good or evil element in them, has continually directed his attention to sensible objects by the continual repetition he hears from his mother and nurse of the words in reference to them: "This is good, this is not good, this is bad."

The good and the bad, then, of which the child forms an idea, are a goodness and a badness presented to him by his senses.

213. This goodness and badness have in them both a subjective and an objective element.

The objective element belongs to the intellect, and is the beautiful and admirable in the object which the child so admires and loves. As I have already pointed out, closer observation proves that the child from the beginning judges everything to be alive. But this judgment, by which the child holds everything to be living, must not be confounded with the conjecture I made above, that beings really living exercise upon him an influence coming from their souls, and passing into his soul, although in both cases through the medium of the body. Should this action, as yet little noticed by philosophers, be ascertained and verified as a fact, its effect on the child must be classed as a feeling, and not confounded with the judgment formed by the child himself. The latter may be mistaken; the feeling is always real. The child may act both on the one and the other. until it is perceived by the intellect, has only a subjective Hence, in the goodness perceived by the child there is a double subjective element, i. e. the corporeal sensation and the animastic sentiment (feeling of the soul).

214. From this analysis of goodness, as understood by the child, arises the question whether the objective element enters into his idea of it, as well as the subjective. This is

an important question in determining the state of the child's mind and soul with regard to the good, and to answer it we must recall two principles already laid down:

- (1) That the child's attention is primarily excited solely by external stimuli; its spontaneous action is always towards external objects, and turns inward to the subject only later, and when constrained to do so by special causes (98, 188).
- (2) That in its primary perceptions the intellectual subject affirms only an entity, but not the qualities or determinations of such entity, which it is satisfied to have in feeling; and not till afterwards, and little by little, according as it is impelled by its necessities, does it direct attention to these sensible determinations of the entity (109 and foll).

Now, it is evident that, to form an idea of goodness, we must previously have some perceptions of what is good; for every such idea is a concept-idea.¹ The perceptions, therefore, from which the idea of goodness is worked out, however imperfectly, must be, not simple perceptions affirming only being, but perceptions somewhat elaborated which affirm also the good in being.

But to affirm this good, to affirm a good being, is to affirm an object; and simply to affirm an object, without going further, is an infinitely easier and more spontaneous process for the human mind than to affirm itself as subject, and by so doing change the subject into an object of the intellect. Previous to the third period of childhood, there is nothing to impel man to turn his mental activity in a direction so opposed to the natural one, or to force it, from the straight line of advance it has taken, to retrace its steps, and fall back upon itself, upon the subject whence it emanates. We shall speak further on of self-knowledge, and show how late it is manifested in the child; yet, until he has

¹ I call a concept-idea that which gives, besides being, some determination of the mode of being.

arrived at it he cannot attribute the subjective element to himself.

215. But admitting this, may he not, nevertheless, perceive this element? Assuredly he does, for otherwise he could not abstract the idea of good from his perception; but he does not recognize it as subjective; he perceives it as a simple object. Hence his own pleasures, his own pains. which, in so far as they are feelings, exist in the subject, in so far as they are observed and perceived by his understanding, are objects, are qualities and properties of real entities perceived by his intellect. All the affections of admiration and love, of disgust and aversion, manifested by the child are directed, not to the pleasure and pain he feels in himself, but to pleasant or painful objects: it is in these that he sees the seat of his pleasure or his pain. Although what he feels is internal to the sense, yet it is external to the intellect, and it is long ere the intellect restores its pleasures to the subject.

The effects produced by pleasure and pain are produced equally by all sensations which come to man through his external organs. The intellect, the law of which is to conceive everything objectively, sees the primary sensations, i. e. color, taste, smell, etc., in the objects whose being it affirms in its first perception, and thus affirms because of the action This is the reason why mankind they exercise on the senses. in general regard as qualities of bodies these modifications of their own feelings; and it is only through deep and assiduous philosophical reflection that we succeed in completely dissipating this error, and stripping external forms of the borrowed vestments in which our childhood clothed them. adorned them, giving them, as it were, flesh and blood. And verily these forces, so denuded by the inexorable thought of the philosopher, remain dry skeletons, I had almost said, thin, imperceptible ghosts, and nothing more.

216. From these observations follows the singular consequence that the child who, in his animal life, acts wholly subjectively, begins with his human life to act on objective motives, long before either his intellect or his will has learn't to recognize and love that which is subjective, that which can be referred to himself. For his infant intelligence does not see those same sensible things which properly belong to the subject, as such, but contemplates and loves and hates them as so many objects.

Hence, it has been justly observed that children show an admirable disinterestedness in things which they do under the influence of pleasure and pain; and it is the error of those who are incapable of observing human nature to assert that self-love is the first of the affections to manifest itself. The authoress we have so often quoted says, with delicate observation, that the child "too deficient in forethought to let himself be the slave of his wants, has the mania and sometimes the pride of independence, and though he receives everything at our hands, his affection yet wears an air of disinterestedness."

217. If, then, we proceed to deduce from all this what is the moral virtue of the young child, we shall find that it consists wholly in benevolence, for this benevolence is objective and, therefore, impartial, disinterested, and preceded by esteem for the object loved. It is, indeed, no other than the benevolence to which the virtue of man in all periods of life may be reduced; for goodness is love.² From this we perceive that the difference between the virtue of the child and that of the man (leaving merit aside), does not consist in

¹ We must distinguish the animal and instinctive, from intelligent, actions. I have shown that it is equally a mistake to attribute the animal actions to self-interest, or to call them disinterested. The truth is, that such action is neither interested nor disinterested, and the same may be said of the action of feeling in general. See Storia Comparativa de' Sistemi Morali, c. iv. art. 4, Comparative History of Moral Systems.

² This truth follows, as it seems to us, manifestly, from all we have written on morals.

the one being benevolence and the other not, since both are equally benevolence, but in the different object of this benevolence; for this object expands in proportion to age and the progress of knowledge.

218. It has been already shown that the object of benevolence or love can be no other than a good. What good, then, can be known to the child who has reached only the second order of cognitions?

If these cognitions have no other object than sensible things, it is clear that he will love what his senses represent to him as beautiful and lovable,—food, light, the smiling countenance of another human being: these and such as these are the elements from which he gathers his conception of good which afterwards governs all his affections. He finds and recognizes the good in all that causes him pleasurable sensations, and he loves it all with effusive and impartial affection. That is his moral rule: it is not ours, indeed, but for him it is the right one and the only one possible. If we do not disturb his inward processes, he will follow it with simplicity and entire loyalty; he is just in his dealings, though without knowing it; his morality exists, although as yet he has attained no consciousness of it.

ARTICLE IV.

CAN THE MORALITY OF THE CHILD BE INJURED WHILE HE IS STILL IN THE SECOND STAGE OF COGNITIONS?

- 219. The child whose understanding has reached the second grade of cognitions may injure his morality in two ways:
- (1) By forming for himself false rules regarding good and evil.
- (2) By not faithfully guiding his affections and actions by the rule of good and evil which he has rightly formed.
- 220. If we suppose the child to be uninfluenced by other persons, he could not form a false rule, unless his primary

perceptions had shown him good objects as bad and bad as good; for it is from these perceptions that he afterwards gains the conceptions of good and evil on which his rule is formed. But this is impossible, for perception follows sensation, and sensation cannot err.¹

The child, however, is not thus left to himself; his conceptions are abstractions which he forms by the help of the language he learns from those around him. It is true that he could not be altogether misled by those who first speak to him; for, if they always called that good which his senses taught him was bad, he would end by understanding the word "good" to signify "bad," and "bad" to signify "good"; his mistake applying only to words, not to things. But if the child is thus safe from error when first learning to speak, will he retain the same immunity when he has gained the use of a larger vocabulary? Suppose that to the words "good" and "bad" he attaches a right meaning, - within, of course, the limits of his experience of good and evil, - will he not soon fall into the errors of those around him?² If, when he has learned to understand the meaning of the word "bad," he is told that that is bad which is good, will he not end by believing it? His senses tell him the contrary, indeed; but is it true that at that age he trusts altogether his own senses, his own experience?

221. This is certain, that, besides the senses and the intelligence, the faculty for persuasion ⁸ awakens very early in the

¹ In the *New Essay*, No. 1246, I showed that perceptions and the primary ideas are given by nature independently of human will, and are, therefore, free from error.

² It will be objected that, in that case the child must have passed to the third grade of cognitions; but, on further consideration, it will appear that this is not a necessary consequence, for the conception of good, so long as it is derived immediately from perceptions or imaginal ideas, is always the result of cognitions of the second order.

³ See, in the Synoptical Table of the Faculties of the Human Mind, at the end of the third book of the *Anthropology*, the place of persuasion,—a faculty so important and so overlooked by philosophers.

child, and one of its functions is voluntary belief, voluntary adhesion to the affirmation of others.

Not only have we the power to believe voluntarily what is told to us by others, but we are naturally inclined to it, and this is the reason of the harm done to children by the evil they hear. Even when the evil spoken of is of a kind which as yet offers no temptation to a child, he accepts it readily from the pure need of believing, of being in unison with the feeling of others. This tendency shows itself visibly in the earliest stage of infancy, and wonderfully helps the infant to understand its mother's speech. It follows that truthfulness is absolutely necessary to the educator, from the very earliest words spoken to a baby in its cradle.

In fact, if a child's teachers do not invariably call that good which is good to him, he will find a discrepancy between that which he feels through his senses and that which is affirmed to him by others. His two faculties of feeling and believing will thus be placed in contradiction to each other, and nothing so delays and hinders his development as this contradiction, causing a struggle between his faculties. the one destroying what the other is striving to build up. The poor infant does not know which side to take, nor whether he is deceived by his faculty of sense or that of belief; his mind is confused; he loses the power to form any steady opinion concerning the merits of things, and, till he has decided for the one faculty or the other, he remains in a state of useless uncertainty and disturbance. making progress, he loses for a long while the calmness, clearness, and order which are the indispensable conditions Even when he has chosen which of the conof progress. tending faculties he will adhere to, he will have no firm faith in it; he will believe in it half hesitatingly; this will lead to weakness of character, to the want of strong impressions, of

large and simple feelings, and of the decided activity which is their result. If he relies upon the opinions of others, rejecting the testimony of his own feeling, he loses the sure guidance of the latter, and it may be predicted that he will turn out, at best, a light-minded man. If, on the other hand, he holds to his own feeling and rejects the authority of others, in so doing he sows the seeds of distrust towards his fellow-men, and, after a rebellious youth, he will reap in his later years the fruits of discord, of selfishness, and of an inexplicable malignity.

It is, then, of the first importance to education at that age that speech should always be exact and truthful, and in unison with the best feelings of the child.

The child who is led by others to form false and imperfect conceptions of good will assuredly derive from them false and imperfect rules of morality. Yet the child is not guilty of immorality in thus yielding to the deception; for he does not wilfully despise or wrong others, nor does he hate them; he only adheres to one or the other faculty, in the impossibility of holding to both, and his choice between them is not arbitrary, but guided by his inclination to one or the other. We must distinguish, however, between immorality and the inclination to immorality. The false conceptions and false standards of the child are not in themselves immoral, but produce a disposition to immorality in the time to come.

222. We have another question to consider, whether the child who has reached the second grade of cognitions always follows his own rules of good and evil, or occasionally departs from them wilfully. To this we answer, that he will always follow them faithfully, and could not depart from them before having reached the third grade of cognitions. For, after he has formed his rule of good and evil, he must, to depart from it, form a practical judgment, that what

he had, by that rule, held to be good, is evil, which supposes a new reflection. Of this we shall speak in the next section.

ARTICLE V.

HOW TO MAKE USE OF THE CHILD'S FACULTY OF BELIEF, TO INCLINE HIM TO MORAL GOODNESS.

223. It must always be borne in mind, that every form of moral goodness is a form of benevolence, and all moral evil is only hate, or a limit put upon benevolence.

Now the educator has two offices to perform as regards the benevolence of the child: 1. To inspire it; 2. To guide it properly.¹

The first of these offices is as important as the second; for the sum of benevolence evolved from a human soul is the material of which its virtue will be composed.² He who has a large amount of benevolence will easily become a virtuous man.

Let us consider, first, how to develop the benevolence in the child, and next how to direct it.

224. In the two earlier periods of infancy, the child, who can as yet neither speak nor form abstract conceptions, can be moved to benevolence only through the pleasurable sensations he receives from external objects. As we have already said, to keep the child habitually tranquil, serene, and happy, opens his heart to benevolent feelings.

When, however, he has reached the third period, it is time that his teacher should employ language as a means

¹ If we consider the matter attentively, we shall find that it is disorder which limits benevolence. Universal benevolence, on the contrary, is ordered benevolence. To prove this is the object of my book entitled Storia dell' Amore, "History of Love."

² Mad. Necker de Saussure properly reproves mothers for the jealousy with which they keep away inferiors whom they consider as rivals in the affections of their children: "Cest mal entendre leur propre interêt," she says, "les affections as transplantent plus aisément qu'elles ne croissent!"

to the same end, and this is made easy by the faculty of persuasion, so early manifested in children, not only through the action of perception, but also through that of faith.

Those who have to educate the child, or simply talk to him, should as a rule, therefore, frequently praise the things that are good, and very seldom blame the bad ones, about which it is better to be silent; in other words, great use should be made of the epithets pretty, good, right, and as little as possible of the contrary ones, ugly, bad, wrong, etc. To apply the latter to persons would be a very serious error.¹

The child, thus hearing only the praises of things as good and pretty, and never blame, will have his benevolent affections, which necessarily follow his thoughts, more rapidly developed than the contrary ones of malevolence; his love and gratitude will flow towards all that surrounds him. It is scarcely possible to find anything which cannot in some one aspect be presented to him as good and beautiful, and therefore lovable.

ARTICLE VI.

OTHER MEANS TOWARDS THE SAME END.

225. By the time the child begins to understand the conventional signs of words, he also understands the natural signs of action and gesticulation. This natural language helps him to learn the conventional one, and vice versa: the two are learned together as one and the same.²

¹ As the child, according to my belief, takes all things equally to be persons, there is the more reason for being careful not to speak ill of anything before him.

² Sometimes the child in the second period will reproduce action and gesture through his instinct of imitation. It may be also that some animastic (soul) feeling mingles with his perceptions. But such actions and gestures influence him more powerfully, when he attributes a meaning to them and they become to him a language. For this reason I have reserved mention of them till now.

When the actions and gestures express feelings, the latter awake in him at sight of the former, whether through some animastic influence, or through the instinct of imitation leading him to reproduce the gestures which are naturally associated with such feelings, or whether both these causes unite to form that wonderful *sympathy* which is shown by children. But in the third period not only is he thus moved, but the acts and gestures have become to him real signs which reveal to him the inward feelings of those who use them.

Let me be permitted to refer again to the observations of another writer:—

"The same faculty, already manifested at seven weeks old, is at the end of a year greatly developed. At that age a lively and therefore forward child can read the expression of faces. You will see him reproducing all the changes of your own mood: he does not know whence comes your change, and yet he shares it with you, and, remaining a stranger to all the causes, he associates himself with all the effects. He is a mirror reflecting with marvellous fidelity your moral condition.

"I will quote, as an example, a fact I witnessed in a still younger child, only nine months old. He was happily playing on his mother's knee, when a woman came into the room whose face wore a look of marked, though quiet, sadness. The child's attention was attracted by this person, whom he knew, but had no special affection for. Little by little his face changed; he let fall his toys, and finally clung crying to his mother's breast. What he felt was, not fear or pity or affection: he simply suffered, and relieved his pain by tears.

"In the same way a child of fifteen or sixteen months old, if present when some serious reading is going on, and all the faces around him express a certain solemnity of feeling, is generally subdued into respect,—a fact which explains how the religious sentiment, apparently so above the capacity of children of tender years, can yet awaken very early in those young souls. An impression, at first objectless, but not without analogy to the solemn emotion accompanying sincere worship, is communicated to the

child through sympathy. He feels himself in a holy place; the idea of something sacred gradually dawns upon his mind, and, when soon after he hears God named as the invisible object of our eternal adoration, the conception of a hidden power is not a strange wonder to him: he believes himself to have felt the solemn influence of its presence."

We are bound to avail ourselves of these facts.

226. We must also take care that even the natural language of signs shall communicate to the child only gentle and reverent thoughts. They will grow up within him, if everything he sees and hears tends to manifest and inspire them.

We may convince ourselves, on the same grounds, of the hurtful influence, on the tender soul of the little child, of external signs of anger, envy, hate, malignity, scorn, etc. They are to him so many corrupting words, whence he derives endless contamination. Equally hurtful to him is the influence of terror, of sudden fright caused by words or actions; but so much has been said on this head by others that I need not insist upon it. I will only point out, as before, that Nature should be our mistress in education, and that, if we observe her, we shall find that she always disposes the child to hope and cheerfulness, and keeps off sad and fearful thoughts. Children never invent for themselves gloomy, sad, or painful fancies; their imaginations are always bright, joyous, gay. This holds good not of childhood only: it is the constant law of human nature. Why, then, do we not aid this natural disposition? Why do we not try to follow Providence, by whom that nature was constituted, and avoid saddening and terrorizing the spirit which it impels to hope and courage?

¹ Mad. Necker de Saussure, L. II. c. iv.

ARTICLE VII.

ON RESISTANCE, CONSIDERED IN RELATION TO THE THIRD PERIOD OF

227. But, we may ask, is not fear also a natural affection of the human soul, and why is it placed there? The answer is, that man may also be restrained within the limits of duty by the fear of a higher power,—that through this fear, he may be made to feel his own weakness in comparison with the power without him, which is the power of the Creator, or of those who do the Creator's will. Such fear as this is not needed by the infant, who would be incapable of recognizing it as the minister of divine justice; and the fantastic terror we might, in our folly, inspire in the childish mind would have no moral character, but be only a blind dread, confusing, instead of directing, its action. As to the sense of its own weakness, it is but too strong already, and the reverential fear towards the Supreme Being can be excited in it only by the idea of a supremely good being, and in no other way.

228. Having, then, excluded the agency of fancifully excited fears on the mind of the little child, we have still to inquire whether we ought to resist his inclinations, and if so, to what extent?

In the first place, there can be no doubt that, when he wishes for something injurious to health, he must be resisted; but it should be in such a manner as to give him as little pain as possible; and the best rule is to manage things so as to prevent such wishes from arising. They are physical, not moral, and it would be unjust, therefore, not to use the gentlest means of eluding them. But, besides this physical disturbance, he may very possibly show inclinations of an immoral kind. In treating of the resistance we must oppose to these, we shall arrive at the answer to the question proposed above, — What are the means of regulating the child's benevolence?

- § 1.—Exercise of patience which may be required of the child.
- 229. One of the earliest anti-moral inclinations exhibited by children is impatience, although this is due rather to habit than anything else. A certain exercise of patience should be required of them, but very delicate treatment is necessary here. We will quote a mother's advice with regard to it:—

"So long as the child is playing contentedly, you may go on with your own occupations. A look, a sign of intelligence from time to time, is enough to make him feel you are watching over him; and his sense of safety from it is perfect. Never let him find himself deceived in this. If pain should come on, or if his inward activity should begin to flag, so that he can no longer throw himself into the things around him, go to him. Yet do not hurry and try to give him occasion for a slight exercise of patience; make him learn, if you can, the meaning of the word Wait. If that word is made to signify to him invariably a sacred promise, it will acquire by degrees a great value in his mind; he will come to understand that he is to receive, but not to exact, and this will make him more grateful and affectionate." 1

The patience thus required is not physical suffering, which the child should always be spared, but moral suffering, if indeed it can be termed suffering, and it trains both the understanding and the moral nature. He waits cheerfully, and thus already begins to regulate his affections.

- § 2. Correction of the child's conceptions.
- 230. Feeling is by its nature impatient.² To wait patiently is always an exercise of intelligence.

¹ Mad. Necker de Saussure, L. II. c. iii.

On the diverse characteristics to be observed in the action of feeling and in that of intelligence, see *Della Società ed il suo fine*, "Society and its End," B. III. c. v.

The impatience of feeling in man is not in itself a moral evil; but it is a bad preparation for morality, and we should begin in good time to overcome it. Anger is also an impulse of feeling, and, in so far as it is such, it is only an evil inclination. As we have already pointed out, care should be taken to prevent anything that might give birth to it in the child.

These passions, and others of which we shall speak presently, manifest themselves in earliest infancy; for at that age the strength of sensual action is great. They require, therefore, to be met wisely by moral rather than physical resistance.

231. The passions act powerfully on the will, and the latter on the understanding, so that the understanding pronounces that to be good which favors the passions, and that to be bad which opposes them. It follows that, if passions awaken in the child and destroy his state of tranquillity, his conceptions will be falsified; for his standard of good will no longer be his natural feeling and healthy instinct, but a passionate desire and a corrupted instinct. The falsity of his conceptions of good and evil in things is, indeed, unobserved; but, in the mean while, these form the child's rule of action, and he loves wrongly and hates what he should love. Such seeds of error in judgment and feeling are small as the mustard-seed, but grow silently into a branching tree; from them come those youths with an inexplicably cold and evil temper; from them men thoroughly bad and incorrigible. The fate of men too often depends on these unwatched beginnings.

To rectify these false conceptions in the child, we must sometimes ward off, and sometimes resist, his passion. It is a great mistake to flatter him, as is often done, by way of giving him pleasure; it is an equal mistake to confirm him in his false conceptions, instead of replacing them by truer ones; above all, we must struggle against those amongst them which inspire him with feelings of aversion and lead him to form unfavorable judgments. Our aim should be to make him see the good in things, and although he can, at that age, see only the good and evil presented to him by his senses, yet we can tell him that those things are good which will be good for him in the future, and thereby facilitate the act of his understanding, by which, later on, he will verify our judgment. We can do this, as we have already pointed out, by availing ourselves of his faculty of belief.

§ 3.—Rectification of bad feelings.

232. Impatience and anger, which have their source in the animal nature, and which, while confined to that, are only anti-moral predispositions, easily gain the assent of the will, and then pass into immoral actions and habits.

The feeling of aversion which also takes its rise in the animal nature quickly passes into the region of the understanding and is transmuted into hate. I do not believe that the human mind at that tender age is susceptible of the passion of envy, which is grief at the happiness of others.

The fact related by St. Augustine of the infant sucking at one breast looking askance at its foster-brother sucking at the other (which is not an unfrequent one), bears the appearance of envy, but I should consider it simply a case of aversion. We may see the same thing in animals. Two dogs eating out of the same platter growl and snap at each other. It cannot be supposed that this is the effect of the displeasure each feels at the good of the other, but arises rather, in my opinion, from the fear each feels that the other will hinder and lessen his own good. The animal, through the unitive power in him, not through intelligence, may perfectly become aware of the lessening

of the food, and he hates that lessening, and, at the same time, the other dog which he associates with it in his fancy. The same animal operation takes place in the infant; but later on, when the judgment of the understanding or only the act of the will is superadded to it, it is transformed into real hatred.

233. Great care should be taken to prevent any occasion of such feelings, in infants who are unable to bear the strength of the temptation and have no arms wherewith to resist it. If we perceive them to have taken an aversion to any one, we should do our utmost to remove it, and the most efficacious way of doing this is to make the obnoxious persons the means of giving them some pleasure they desire; their personality will then cease to be obnoxious, and the child will lose its dislike.

§ 4. — Removal of the limits too easily set to the benevolent affections.

234. It is a phenomenon difficult to explain, why the child, and indeed the human being generally, though benevolent by nature, gradually limits his affections to a certain circle of persons and things.

There seems no doubt that the new-born infant makes no difference between persons; or at any rate, that he shows affection to any one who supplies his wants and caresses him. Thus, he often cares more for his nurse than his mother, if he is more accustomed to the former, and if she performs the mother's office towards him. Nor does he show any preference as to who shall be his nurse, but loves the one that is given to him, and at six weeks old smiles impartially back to whatever feminine face smiles first at him. The inclination to benevolence is thus general in the infant, so long as it remains passive; but, so soon as it becomes active, it assumes a limited and exclusive

form. At one year old the child already feels unpleasantly impressed by new faces, and this dislike which he takes to strangers goes on increasing with his years up to a certain age: he becomes timid, shy, rude; shrinking from them, and taking a long time to get used to them. How is this phenomenon to be explained? I believe that several causes concur in producing it, and it is perhaps difficult to trace them all.

235. In the first place, the rational affections are governed by the intelligence which supplies their objects. Now, in the sphere of intelligence we must note the phenomenon of attention, which is a concentration of the scattered forces and, at first, inactive powers of the mind, bringing them to bear all together on a single point, a single object. mind, when it has thus fixed its attention on one object, has no more to spare for others; it takes no account of them, or at best a very slight one. Now this concentration of faculty in intelligence takes place also in the will. The latter, so long as its action is slack and divided, remains indifferent among the various objects present; but, so soon as it is concentrated and applied to one, or to a given circle of objects, all others cease to exist for it; its whole disposable amount of benevolence, so to speak, being already absorbed and exhausted by those it has selected.

236. These facts would be sufficient to explain why the child who has become attached to one set of persons and things should be cold and indifferent to others. But this is not the whole state of the case. As he grows older, the child is not only indifferent to persons he is not in the habit of seeing, but he is startled and alarmed by their appearance. He shrinks from their approach to him, and shows himself disturbed, angry, and hostile to them. How are we to account for this? We will try to point out some of the principal causes which seem to us to

concur in producing this condition, without, however, feeling sure that we have exhausted them all.

It seems probable that, when the human heart has no more benevolence to dispose of, it retains the contrary affections, fear, ill-will, aversion, in a state of extreme susceptibility. To the child who has no more affection to give them, his fellow-creatures appear mysterious beings, from whom he expects no good and whose power he fears: not being beautified by affection,—for it is love only that makes objects fair and sweet to us,—they become obnoxious to his mind, which is uncertain as to their good or evil nature. Others have already observed that a new idea presented to a child's mind produces something of the same kind of alarm. If this effect follows from a new idea, it is yet more likely to follow a new perception, where the latter is not softened and disguised by a yet stronger feeling of affection.

237. To this we may add another physiological law, i. e. that man is always unwilling to retrace his steps either in thought or in affection; to undo the acts of his intellectual and moral faculties in order to re-enact them differently. It is easy to convince ourselves of this by the following experiment on children: Tell them a story, and they will delight in it; but woe to you if in telling it the second time you alter the least circumstance, or even add one! They correct you at once, and insist upon having precisely the same representation. Why? Because that representation being vividly impressed upon their minds, they cannot bear to spoil or efface that beautiful imaginary picture, to paint it over again. The same thing happens with the will of children as with their fancy and understanding. Unlike adults, who always reserve a certain portion of their affections for the new objects which may prove deserving of

¹ See Storia dell' Amore, L. I. c. ii.

them in future, children never think of the future, of which as yet they have no conception, and pour out on the first objects of their affection the whole treasure of their love. I have already spoken of the vehemence and singleness of childish passions (158-162). This being premised, it is evident that a new person appearing before them naturally invites their affection; but, to give it, they must first withdraw some portion previously disposed of elsewhere and bestow it on this new object. Now this is peculiarly obnoxious to them for two reasons: first, because they would have to go back on a benevolent action already accomplished, so as to diminish it; and, secondly, because they do not see how their affection can be withdrawn from the things they love. Would it not be wronging them? How can they begin to love less those to whom they have given all the love they have? By what fault have they ceased to deserve it? Children are susceptible of a feeling similar to, and yet opposed to, jealousy. As the jealous person suffers and is irritated by the fear of being robbed by another of the affection of the loved one, so the child is the lover fearing lest his own affection for his loved one should be stolen or diminished, and refusing to give This affection of the child is not given to persons only, but to everything about him; and this explains why changes in the circumstances and order of his life annoy him so much, and put him out of temper.

238. There is a third reason following from the second, which is bound up in the phenomenon we are endeavoring to explain. The child's first instinct is to avoid pain; the second, to enjoy in peace his own well-being; his nature is full of pleasure, because full of life and sensibility. Moreover, when he has distributed all his affections among the things and persons with whom he finds himself, he has marked out in his thoughts the sphere of his happiness.

There lie all his joys, and he cannot imagine any others. What wonder, then, if he is jealous of such a domain? A new object introduced into it is a break in that whole which forms his state of existence, and which he perceives as one thing: it spoils his infant paradise, in which he cannot bear any change, any more than in the story which is told to him. We may trace an affinity between this tendency of children and the instinct and idea of property which awakens so early in their minds. All the things about them become, by the unitive force of their feelings, a part of themselves, and to take away any one is a violence done to them. This phenomenon may be observed in animals also; for it is an effect of the unitive force which belongs to their nature as to man's, and it has the appearance of the thought and love of property, which it is not. The idea of property follows it, however, as I have said. Mad. Necker de Saussure relates having seen a little girl of eighteen months cry, if any one touched her nurse's work-basket. "One day," she adds, "the same child, seeing a strange woman carry away a dress of her mother's, began to scream violently. The same thing happened the next day; and, from that time, she showed uneasiness at the sight of strangers, and, when they went away empty-handed she would accompany them to the door with a politeness which showed how great was her relief at their departure."1

239. There is, finally, a fourth and deeper cause which I believe to have a large share in the limitation of children's affections at a certain age, and that is the special nature of their attachment to actual individual objects. There are, in fact, two forms common to every entity: the ideal, which is the principle of universality; and the real, which is the principle of individuality. To these two forms of the entity

correspond in us two powers: that of intellect, through which we have the intuition of the ideal; and feeling, which constitutes all reality. The reality of feeling is subsequently confirmed by our judgment, which is a third power. In the intellectual order, then, the intellect gives us the idea and judgment gives us the thing (res). Then follows the will, going out with its affections towards both the idea and the thing; for it may find its term in both forms of being. then, we love any object for its good qualities, we love it in and for its ideal form; but if we love an object for itself. and not only for its qualities, we love it in its reality. idea being, as we have said, the principle of universality. our love is, in the first case, universal also, and therefore ready to turn to whatever other objects possess the same gifts and qualities on which alone it is fixed. The real, on the contrary, being the principle of the particular, our love for it, in the second case, is particular and exclusive, and refuses any other object, solely because it is another, though it may have the same good qualities as the first. This second kind of love is the principle of restriction and limitation of benevolence, and its nature is anti-moral where it does not find its term in the divine. Self-love is of this second kind: we love ourselves, not for the good qualities we possess, but because we are ourselves. Parental affection is of the same character. What father or mother would take an angel of goodness and beauty in exchange for their own ugly, ill-conditioned offspring? They want their own, and love it personally above all others. Physical love is a third example of the same species: lovers care only for the one person to whom they have devoted themselves, and demand a similar love in return: hence their jealousy, which is the fear lest the individual, personal love of their loved one should be drawn away by an ideal love, i. e. love of the good qualities of others. In children, the love which rests on the

good qualities of the thing or person (ideality) is intimately bound up with that which is given to the actual thing or person, and easily degenerates into a love in which the latter element (that is, love of the real individual) prevails and holds dominion. In proof of this I will quote the following incident related by an acute observer: "A little girl let fall her beloved doll, which unfortunately broke its nose. Screams and utter despair followed, which were increased by the imprudence of her father, who, taking the matter too lightly, half in joke and half in attempting to mend the unhappy nose, melted it away altogether, leaving only an immense hole in its place. This threw the child into such a passion of mingled grief and anger that she nearly went into convulsions. Those about her did their best to comfort and quiet her by promising that the doll should be taken away and cured, and at last the weary child was got off to sleep. While she slept a new head was bought and put on the doll, in the belief that this would make her quite happy on waking. on the contrary, her grief became more violent than ever, and assumed a touching tenderness. She was no longer the little fury, but a true mother to whom they had dared to offer another child in the place of her own. She could scarcely speak for sobs. 'Oh, it is not — it is not my doll! I knew her, — I don't know this one! Do they think I am going to love it? . . . Take it away! I won't look at it again!"1

Every mother, or other person accustomed to watch children, will bear witness to similar facts, proving that their affection is given, not to the good qualities in an individual, but to the reality of the actual person. True it is that this love has its origin also in the ideal and universal love; that is, in the love of good qualities, real or supposed; for the human heart can begin to love only sub specie boni, but later on it degenerates and becomes corrupted: it substitutes the person

¹ Mad. Necker de Saussure, L. III. c. v.

or thing for the good qualities and gifts which it saw or accustomed itself to see in them; at first it believes them to be so inherent in the person or thing that they cannot exist elsewhere, and are found there alone; next, the good qualities are loved rather because they are found in the loved person or thing than for their own sake; and at last, the individuals are loved for themselves alone, even when they have lost the qualities for which they were first beloved, and which now, when found in others, cease to excite love. Love, in fact, has here become profoundly immoral.

240. Let it be noted, however, that in speaking of the love which has the ideal for its object, I did not mean that it excluded the real. A love that should exclude reality would be rather an incipient than actual love; it is that which has been termed platonic, and which is felt neither by children nor the mass of mankind, but solely by the philosopher by nature, who arrives at ideas, but can neither go beyond nor realize them. That kind of philosophical love to which may be ascribed the best part of natural virtue does not enter into our present subject. The love which we have described has for its object the entity in and for its ideal form. The idea, then, i. e. the good seen in the idea, is the standard by which actual entities are loved; the latter are truly loved; yet not only because they exist, but because they exist with the gifts and qualities which make them lov-The other kind of love we have spoken of loves the actual entities without going beyond, and forgetting or even excluding their good qualities.

I am well aware that this simple preamble to what I have further to say on this subject will send a chill to the hearts of all mothers, wives, fathers, and husbands; but I am bound to speak the truth, and to put before everything else the dignity of human nature, which amply repays the value of every affection sacrificed to it. I shall, however, appear less cruel if followed to the end.

In examining, then, into the moral value of the two forms of love which we have distinguished above, we shall be led to the following reflections.

241. It is feeling which constitutes reality. A real being as such, i. e., in so far as it is feeling, seeks only the real, is attracted by it alone, and cares to unite itself only with its like, i. e., with another real being. All these tendencies, or, as they may be called, affections, although blind, are not wrong so long as they keep within the sphere of feeling; they are rather to be considered as having no moral character, and being neither virtuous nor vicious, neither meritorious nor the reverse, though they have an eudemonological value.

But when the intelligent human being, the moral person, assigns to them a value, they enter the sphere of morality. If the value assigned to them by the understanding be just, the person so judging them has performed a virtuous act; if it be unjust, the act is blamable. What, then, is the just value which should be assigned to such affections?

In themselves they have none at all, but, considered as elements of happiness, they have a value when they become the rewards of virtue. In this relation they become right and desirable even to the moral being. But how great is the danger lest they should be valued for themselves, independently of their relations to virtue! This is one of the primary sources of human depravation.

242. Leaving aside, then, the affections that spring solely from the senses and feelings, let us consider the morality of the rational love having for its object real being.

In the first place, a finite reality, considered in itself, apart from any attributes, is impossible to conceive; it is nothing, it presents no basis for our love. The infinite reality alone can be loved as such: that alone is.

In the second place, the love of finite realities, on account

of their good attributes and qualities, is certainly right; but it is love of the second kind, illumined by the ideal: a love which is not exclusive, but which expands to all objects in which it finds similar attributes and qualities: a love which is not unchangeable, for it grows and diminishes with them; finally, a love which is not excessive, since it is measured by their value. The love which has for its object a reality like itself expends its whole force upon that.

In the third place, between the love of the real in itself and the love of the ideal in the real, we find the love of beneficence and the love of gratitude which are also governed by the *idea*.

243. The love of beneficence is that which loves to produce in its objects the good qualities and attributes which it aims at. Its scope, then, is moral, for it does not love the real for its own sake, but as the realization of those qualities which deserve to be loved.¹

The love of gratitude is bestowed on the beneficence of the person loved, and therefore terminates in the benefactor's good qualities. Moreover, it desires to return the benefits received, and this feeling is also moral; for either it desires to produce or to perfect some good quality in the benefactor, or to bestow some eudemonological benefit upon him. The latter is a moral act; for such a benefit bestowed out of gratitude is a benefit given on account of, and as a reward for, the good action whence came the benefit.²

In each of these cases the love of the real is not absent; but, governed by the idea, it remains still the love of the idea realized, and, therefore, it is free and not confined or blind or exclusive.

¹ If beneficence aimed only at giving to the real being eudemonological benefits, without any reference to virtue, it would belong to the love of the real.

² In the *love of gratitude* there is, perhaps, always something of love of self, that is, of the real, which in this case is proud of becoming the minister of justice.

244. We have now seen what are the causes which narrow a child's affections and limit his benevolence. We may deduce from them this most important rule of education: use every means to keep the benevolent affections in the child open, enlightened; not exclusive, but universal. The science of education in relation to infancy will have reached its culminating point, when it has determined what those means are, whether negative, avoiding every occasion of limiting the child's affections, or positive, bringing him to bestow them universally and justly.

We will say this only to mothers, nurses, and parents, that, if they fear to lose by this method something of the love they covet from their nurslings, they could not make a greater mistake. The only result of it will be to change a love resting on false grounds into a love resting on true ones; an impetuous but inconstant love into a calm but everlasting one; the exchange of some childish caresses for heartfelt respect, which, while it gives their children that moral dignity which is the highest attribute of man, will give to themselves the fullest assurance that they will receive from them in return zealous aid and support through all chances and changes while life lasts, and an honored memory after death.

ARTICLE VIII.

ACTS OF RELIGIOUS WORSHIP WHICH THE CHILD SHOULD BEGIN TO PERFORM
AT THIS AGE.

245. The first and best of all positive means to foster and render universal and wise the benevolence of man from his tenderest years, is to turn his heart from infancy towards the source of his being, the Creator.

God, comprehending in himself the whole of being whence everything that is is God loving all things, for he has made and is making them all,—God is the sum of all good towards which the heart of man tends, and therefore the love of God contains implicitly the love ordained for all other things. Hence it is from this flame that benevolence is kindled, and derives at the same time its immense expansion and its governing principle.

Truly it is in vain that Rousseau pretends that the worship of God is beyond the lisping of the infant tongue. On the contrary, the little child, as if nearer to its origin, seems to turn towards it with delight, to seek it with eagerness, and to find it more easily even than the adult; and it belongs to God rather than to man to impart himself to the simple soul that knows nothing, yet understands its Maker. As was to be expected, the sophistical Genevese of the last century has been amply confuted in this and in his own country.

We have seen that the child at its third period already begins to conceive the idea of God; it can, therefore, feel love for Him, or rather it cannot help loving Him.

If, then, we consider that, for all who admit the existence of God, He is the bond which keeps the universe together, the reason, the beginning and the end of all things, the good of every good, the essential good, who does not see that this idea of God for all who are neither atheists nor utterly inconsistent, must govern, subordinate, and direct all others? Who does not see that from it alone human education can derive its unity, its principle, its guiding light, and not less that of children than of adults; of individuals than of society; of nations than of the whole human race.²

Let us, then, when we have taught the child the meaning of that word God, teach him at once to turn with all his infant affections towards Him. I have already shown that

¹ The reflections of Mad. Necker de Saussure on this subject are so full of beauty and sense, that I cannot leave it without pointing them out to the reader and urging him to read them in the original. See B. III. c. vii. of the work quoted above.

² See Saggio sull' unità dell' educazione, "Essay on the Unity of Education," in Vol. II. of this collection of Pedagogical works.

man, in giving his heart to God, does not withdraw it from other things, since God is to be found in these also. He only sanctifies his affections, prevents any change in their nature, and makes them at once nobler and more enduring.

246. Here I must say a word to Christian fathers and mothers: to any others my words would be unintelligible, and for that reason intolerable: let those, then, close their ears whose feelings have not reached the height which truly Christian parents derive, not from nature, but from the word of the Highest.

The law of God is a light unto the feet of the latter, and therefore they fear not to consult it. Let them see, then, how that law determines the affections of their children towards themselves and towards the Supreme Being.

What does the law of God ordain towards the Supreme Being? Love: here are its words: "Thou shalt love the Lord thy God with all thy heart and with all thy soul and with all thy mind."

What does it ordain for children towards their parents? Honor: here again are its words: "Honor thy father and thy mother, that thy days may be long in the land which the Lord thy God hath given thee."²

Why is *love* thus reserved for God, and *honor* commanded towards parents? What is the meaning of this distribution of the affections?

The distribution made by this law is directly opposed to that made by nature; for grace is in continual opposition to nature, being larger in its views and affections than nature, which surrounds itself with limitations that grace breaks through and removes. Nature thus inclines man to love his parents, and rather to honor his invisible Creator than to love him.

247. But was it intended by the Divine law to condemn

¹ Matt. xxii. 37.

² Exodus xx. 12.

either the natural love of children towards their parents, or the honoring of God? Assuredly not: it aims only at preserving natural inclinations from being transformed and corrupted. To this end, it adds to the honor which natural reason suggests towards God, the counterbalancing precept to love Him; and to the love felt for parents it adds and gives as a counterpoise the precept to honor them. Moreover, to the honoring of God it adds and counterpoises the honoring of parents; and to the love of parents it adds and counterpoises the love of God. Thus the natural affections, counterbalanced by the divine precepts, can be maintained free from excess or perversion.

It must be remembered that what is natural does not require to be commanded, but only regulated. Parents need have no fear as regards the love of their children: nature guarantees that, and it is only necessary to take care that they do not themselves check it by their own bad conduct. But let them (I am still addressing Christian parents) remember also that what they have to fear is, not that the love of their children should be wanting, but that it should be excessive in one direction, and in another degenerate into sterile sentiment, which, springing from mere instinct, will yield later to a stronger instinct, — that of selfishness. They must guard against the first of these perils, which renders the love of their children immoral, by striving to give to God the larger place in their children's hearts, mindful of the Redeemer's words: "He who loves father or mother more than me is not worthy of me;" and of those others which show that, where they come into collision, God must be preferred to parents: "If any man come to me, and hate not his father and mother, . . . he cannot be my disciple."2 They will guard themselves against the second peril, if they require from the child the honor due to their authority,

¹ Matt. x. 37,

which is the source of reverential love, of obedience, and active service. All these are included in the law of God, and are a good exchange for mere sensual caresses.¹

Love, then, towards parents is the better for bringing into it the honor commanded by the law of God: the latter determines the quality and manner of it, — its seriousness and its activity.

In the same way the honor paid to God is enhanced and determined by the command to love him also; so that neither the love shall be purely external and material, nor the honor proceed merely from servile fear of overwhelming power, but shall be honor informed with love and full of a confident hope, — the worship, in spirit and in truth, of the true worshippers, who, seeking to do the will of God, find it in doing whatsoever they can to benefit their parents and all other human beings.

Let me, then, be permitted to affirm that every usurpation turns against those who commit it, and, hence, that the most affectionate Christian parents should watch over themselves,—a counsel perhaps never given to them before,—lest, in usurping that final love of their children which is due to God only, they should lose that which is legitimately due to themselves, and which the law of God assigns to them.

248. To return to the infant: It is evident that its faculty of worship must be in proportion to the development of its knowledge of the Supreme Being. The extent of the latter at that age has already been pointed out (181–182). The worship corresponding to it should be of the simplest kind; nothing more than a feeling of love expressed in words. Adoration which, as well as homage and thanksgiving, in-

¹ St. Paul, commenting on the fourth commandment, places obedience as the first element of the honor to be given to parents (children, obey your parents in the Lord; for this is right. Honor thy father and thy mother, etc. Ephes. vi. 1, 2), and Christ, explaining that commandment, declares that the honor commanded towards them includes supporting them in their need. (Matt. xv. 5.)

volves more complex feelings and conceptions, belongs with them to a later period.

I think it important also to give time for the sufficient development of the grand idea of God in the infant mind, before surrounding it with accessory ideas and other religious doctrines. The child's thought should be concentrated on the majesty of the Supreme Being; when he has arrived at a deep feeling of that, when the thought of God and his attributes has attained dominion over him, then it will prove a thoroughly solid foundation on which all other religious ideas can be built up,—a centre round which they will gather: religion will then rise up, as a majestic temple, in the soul of man.

SECTION IV.

ON THE COGNITIONS OF THE THIRD ORDER AND THE CORRESPONDING EDUCATION.

CHAPTER I.

THE FOURTH PERIOD OF CHILDHOOD, AND THE DIFFERENCE BE-TWEEN THE PERIOD AND THE ORDER OF COGNITIONS.

249. The order of cognitions marks a fixed epoch in the mind: with his first cognition of a given order the child enters into a new intellectual condition; an immense field is opened before him, in which he might roam without finding a limit, even were he unable to rise beyond that order to a higher one.

But when we try to determine the precise period at which the mind passes from one order to another, we are met by extreme difficulties. In the first place, all children do not reach these intellectual stages at the same age, and even to determine the moment of their attainment in any individual child would be excessively difficult, both because we cannot be sure that the passage from the one to the other will take place within our observation, and because, even if it did, it might easily escape us. The first step taken by the child in a new order of cognitions may be so slight as not to be detected, and, again, the analysis of these mental processes demands from the educator vastly more time and sagacity than are needed by the child in his rapid passage from the one to the other. It would, therefore, be impossible in a treatise on method to determine precisely the time at which each successive period begins and ends, and yet we believe that an endeavor to fix them approximately may not be without its use.

250. Even this is a matter of difficulty which we could venture upon only on the strength of such experience of children as we have gained, and in the hope that the experience of others will come to correct and complete the task which we are, perhaps, the first to undertake.

We shall begin by indicating the principle we have followed, and which we shall adhere to in dividing the periods. The passage from the one to the other not occurring at the same age in all children, we shall try to ascertain the time when it generally takes place, taking as its sign some act of intelligence common in childhood, but indubitably belonging to a certain order of cognitions. Thus we have assigned the end of the sixth week as the beginning of the second period of infancy, that being the time when the infant generally begins to smile back at its mother, thereby giving the first certain sign of intelligence. We have assigned the beginning of the third period to the close of the first year, because children generally begin to speak at that time, and speech is an act which belongs undoubtedly to the second order of cognitions. By the same rule we shall assign the beginning of the fourth period of which we are now about to treat to the end of the second year, for in their third year children can generally learn to read, as reading is an act which belongs to the third order of cognitions.

251. In this method of division it will be seen: (1) that we take as our rule the order of cognition as marking the limits of each period; (2) that this rule cannot be applied in fixing the time except approximately.

Hence, when we say that the third period of childhood begins with the second year of age, and the fourth with the third year, we do not for a moment mean to assert that a child has formed no cognitions of the second order before reaching his second year, but only that we take no notice of them because they are not generally observable at that age. In the same manner, when we fix the beginning of the fourth period at the third year, we by no means assert that a child cannot earlier than that attain some cognitions of the third order; but we first make mention of them at that time because then cognitions of the third order commonly appear in children so unequivocally as not easily to escape observation.

We beg the reader to note this explanation once for all, and to apply it as we go on through each successive period of life remaining to be considered.

CHAPTER II.

ON THE MENTAL PROGRESS MADE AT THAT AGE WITH RE-GARD TO THE COGNITIONS OF THE PRECEDING ORDERS AND THE CONCOMITANT DEVELOPMENT OF THE OTHER FAC-ULTIES.

252. Even should the child pass through his third year without rising to a new order of cognitions, the development of his faculties would still go on, although they must remain within the limits assigned by the previous order. There would be: (1) an increase in the number of cognitions belonging to the previous orders; (2) the cognitions themselves would become more accurate, by being repeated and impressed upon the mind; they would draw out greater power of attention, and become merged in that universal feeling which they always occasion, and which is the source of fresh activity.

Progress along these two lines of number and accuracy takes place in each order of cognitions, and this fact must never be lost sight of in following out the course of human development. We point it out here, once for all, leaving it to the reader to apply it at each period to all the cognitions of the preceding orders.

The active faculties of the will are developed pari passu with the passive faculties of the understanding, and, simultaneously with both, all the animal faculties, which all tend to form habits of various strength and quality.

CHAPTER III.

ON THE COGNITIONS OF THE THIRD ORDER.

ARTICLE I.

WHAT ARE THE COGNITIONS OF THE THIRD ORDER IN GENERAL?

253. As the cognitions of the second order are those that have for their object the relations between cognitions of the first order, and between these and the feelings which precede cognitions of the second order, so, likewise, the cognitions of the third order have for their object the relations between those of the second, or whatever thoughts and feelings the human being has experienced prior to the second.

The cognitions of the second order, then, may be classed under two heads:

CLASS I. Cognitions of the second order which have for their objects the relations between the cognitions of the first order.

CLASS II. Cognitions of the second order which have for their object the relations of the cognitions of the first order with the feelings existing in man.

254. The cognitions of the third order being reached by the mind through *reflection* on those of the second order, become somewhat more complex, and may be divided into the following classes:

¹ Under the term feelings I include the action of all the faculties of the human mind, so far as that action is, as I have shown, always joined to a feeling. There is is a difficulty in understanding this conjunction of feeling and cognition, because it is difficult to form a clear conception of the unity of the human subject, on which conception, however, depends the explanation of all those facts in which the sensitive and intellectual elements are combined.

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- I. Those which have for their object the relations 1 between cognitions of the second order.2
- (A.) Relations between the first class of cognitions of the second order.
- (B.) Relations between the second class of cognitions of the second order.
- (C.) Relations between the cognitions of the first class and those of the second class, always of the second order.
- II. Class of cognitions of the third order: those which have for their object the relations of the cognitions of the second order with those of the first.
- (A.) Relations of the first class of cognitions of the second with those of the first order.
- (B.) Relations of the second class of cognitions of the second with cognitions of the first order.
- III. Class of cognitions of the third order: those which have for their object the relations of the cognitions of the second order with the feelings preceding them.
- (A.) Relations of the first class of cognitions of the second order with antecedent feelings.
- (B.) Relations of the second class of cognitions of the second order with antecedent feelings.

This table shows that the number of classes of the cognitions of the third order has already reached to seven; no slight proof of the immensity of human thought, and of the labyrinth which has to be threaded by those who would investigate it and trace its limits.

¹ It must be always understood that these are the immediate relations, perceived by a single additional act of reflection.

² The expression relations between the cognitions is used for brevity; but it must be understood to mean the relations between the objects of the cognitions. It is true that the mind can reflect on all the objects of its cognitions as well as on the cognitions themselves; but the latter, considered as acts of the subject, come under the head of feelings; when they are afterwards perceived intellectually they become the objects of the cognitions: hence the cognitions reflected upon are classed either under feelings or under objects of other cognitions.

255. As it would take too long to give an example of each of the seven classes, I will restrict myself to giving one only of the last, — that in which the acts of the human mind are most complicated.

When the various sensations I receive from a rose come to me through my several organs of sense, I form at the same time an intellectual perception of the rose (first order of cognitions). Supposing that during the night I become conscious of the scent of a rose, I can argue from the scent to the existence of the rose close by: a process of reasoning which I accomplish by reflecting on the relation between the odoriferous sensation and my past perception of the rose, and this belongs to cognitions of the second order (second class). If I go on reflecting on the rose, the existence of which I have inferred, and argue from it that, if a rose is there, it has thorns which would prick me should I attempt to grasp it, I shall form a cognition of the third grade, and of the last class in that order, because I join by reflection the invisible rose (cognition of the second order) with a feeling in me, i. e. that of pain.

ARTICLE II.

METHOD WE SHALL FOLLOW HENCEFORTH IN THE EXPOSITION OF HUMAN DEVELOPMENT.

256. It would be an endless task to follow out all the classes into which the third grade of cognitions can be divided, not to speak of the succeeding grades. We shall not attempt to cover so vast a field, useful as it might be, but, leaving it to those who come after us, we shall, in order to keep within the scope of this work, follow henceforward, in tracing out the gradations of man's intellectual development, a simpler but regular plan, leading us to the method best suited to our purpose.

In the first place, we shall begin, in dealing with each order

of cognitions, by carefully marking out the various classes into which it is divided, so as to place before the reader a ground-plan, giving the extent of the order and the limits and varying complexity of each of the cognitions belonging to it. Afterwards, leaving aside this sketch of the larger field of research, we shall consider as a whole the cognitions of that order according to the following plan:

First, we shall take the processes of the mind by which the cognitions of the order in question are arrived at: then we shall take the objects of those processes, i. e., of the things we have succeeded in knowing through them.

Second, as regards the objects known, these must be either elementary ideas¹ common to all forms of knowledge, or they must belong to one or other of our three supreme categories, under which must fall all the things that are or that can be thought.

To sum up: the following scheme will lay before the reader the method we shall pursue in treating of each order of cognitions, and he will find it no small advantage to keep it before him, as a map on which to follow the road we go over.

- A. Processes by which the mind arrives at cognitions of a given order.
 - B. Objects of these intellectual processes.
 - I. Common objects or elementary ideas.
 - II. Categorical objects, that is:
 - 1. Real and ideal.
 - 2. Moral.

¹ The elementary ideas are those which are contained in the idea of being, the most universal of all. See New Essay, No. 575 and foll.

ARTICLE III.

PROCESSES BY WHICH THE MIND ARRIVES AT COGNITIONS OF THE THIRD ORDER.

BECTION 1.— Cognitions of the third order are always reached through synthetic judgments: law by which synthetic and analytic judgments constantly succeed each other in the mind.

257. At this period of childhood the processes for which the mind is fitted are synthetic judgments.¹

And, in fact, the child arrived at this period, having formed in his mind abstractions from sensible things, such as color, taste, or, at any rate, sensible pleasure or pain, is capable of using these abstractions as so many predicates added to a subject, and can therefore at sight of a certain kind of food, say "this is good" or "this is bad."

Let us note here carefully the march of the child's mind.

I have elsewhere 2 confuted Kant's a priori synthetic judgments. At the same time, I have myself admitted an a priori synthetic judgment, but only one, which I have termed the primitive synthesis or perception. I have declared to be a priori that earliest of all judgments by which man affirms to himself "something exists," because in that the predicate is existence, which is not derived from experience, but which is an intuition through an inward act of the mind. This a priori synthetic judgment is the process corresponding to the first order of cognitions.

But so soon as the mind has perceived things, it forms

¹ Synthetic, that is, combining judgments, are those in which the mind having the conception of something which may be a common predicate, applies it, in fact, to that which we feel or perceive; in other words, we predicate it of some object although it does not belong to our conception of that object. For example: when we say "this food is good," we form a synthetic judgment, because the predicate "good" which we attach to our conception of the food forms no part of it, for the food might be bad.

² See New Essay, Nos. 342-352.

analytical judgments on its perceptions and on the memory of these perceptions; that is to say, it decomposes both.

258. There are two modes in which the decomposition of perceptions takes place; the first is the natural mode by which the mind contemplates the simple idea of the thing, without attending to the judgment regarding its subsistence. This decomposition of the idea of the judgment concerning subsistence, which takes place naturally, is not an analytical judgment, for it is not a judgment at all; the subsistence and the idea are two heterogenous things which naturally come apart: the mind simply directs its attention rather to one than the other of two things which are naturally sepa-The second mode of decomposition is an artificial process applied to imaginal ideas, from which some one of their elements is subtracted, and this process is a true analytical judgment, because it is an actual decomposition of This is accomplished, as we have one idea into several. seen, by the aid of language; and under this aspect languages are entitled to the name of analytical methods, given them by Condillac. Such is the process which corresponds to the second order of cognitions.

It is evident that the human mind, in going through this process, acquires new predicates. Primarily it possesses only that one, innate in the mind, of existence, which enabled it to form its primary synthetic judgments. These supplied the material for the analytical judgments which followed, and the latter again furnished the mind with new predicates, which being combined with more and more subjects enabled it to form new synthetical judgments. Thus, for example, if I already know what is sensibly good or

¹ Analytical or dividing judgments are those by which we decompose the object perceived into its several parts. For example, when we say "food is anything that is eaten," we express an analytical judgment, because in the conception of food are united the two conceptions of "something" and "eatable," which in the above proposition are divided.

bad, I can, on seeing a kind of food exactly similar in appearance to one I have formerly found agreeable to my palate, join the predicate good to the object I see, and pronounce the following synthetic judgment: "this is good," or "this which I am looking at is good."

259. We must be careful not to confound the synthetic judgment by which I pronounce "this is good," with the purely sensible apprehension which is manifested alike by the lower animals, and which arises from the association between their various sensations. If the dog trembles with eagerness at the mere sight of the food which he cannot yet seize upon, he does not pronounce a judgment; but the sight of the food revives the phantasm of the pleasant taste he has before experienced, which again excites his desire and corresponding action. 1 No judgment is pronounced except by a being capable of having an intuition of a predicate by itself (abstract), and then of joining it to a subject, i. e. of seeing the said predicate in a subject. The second series of synthetical judgments belongs, therefore, to the third order of cognitions. Before going further, it may be useful to point out here the universal law of human development, which is this: The synthetic and the analytic judgments alternate with each other in such manner that, if we dispose in a series the various orders of cognitions, we shall find the uneven numbers of the series composed of so many files of synthetic judgments, and the even numbers of as many files of analytical judgments.

That this must be the course of things is manifest from the fact that we can decompose only what we have previously put together. Hence composition must be followed by decomposition, and the latter by recomposition, and so on

¹ All these phenomena in animals which have the appearance of reasoning have been explained by me in Book II. of the *Anthropology*, through the laws of pure animality, which, so far as I am aware, has not been done before.

in continual alternation. Those orders of cognition, then, which are formed through composition or synthesis, give to the mind new *subjects* to analyze, and those formed by decomposition or analysis, enrich the mind with ever new *predicates*, which are capable of being synthesized, *i. e.* joined to other subjects.

SECTION 2.—What is contributed by analytical judgments to the third order of cognitions.

260. Together with the synthetic judgments proper to the fourth period, the child continues also to use analysis.

It has been already pointed out that the mental processes which begin in the earlier periods continue in the later ones without interruption, only increasing in number and completeness (252), and thereby complicating more and more the course of human development. To this must be added that each period brings fresh material for analysis and abstraction, because the analysis of thought is ever at work decomposing all things, and thus decomposes again the results of previous decompositions. There is assuredly in thought the same infinite divisibility as in the decomposition of matter, which shows how vain are the efforts of those logicians who would try to reduce the knowable to absolutely elementary ideas.

Another consequence follows from this, i. e., that, although analysis belongs to the second order of cognitions, yet some of its products are proper to the third, and could not appear earlier. This applies equally to all the following higher orders of cognition, so that, at each intellectual stage, analysis contributes something proper to itself.

261. The first abstractions made by the child are those of the sensible qualities of things,—their felt pleasantness or unpleasantness. These qualities are, in fact, only effects produced by things on our faculty of feeling. It is natural that the child should, at first, attend only to what it feels.

for what it does not feel has as yet no existence for it. But, so soon as it is able to bring into harmony the sensations derived from its various organs, to receive the one as the forerunner of another, to expect the latter because it has received the former, etc., it arrives little by little at directing attention to the actions of things, at abstracting their action from the things, always by means of language, that is, by means of the verbs which exactly mark the action of things.

Let me again quote here a mother's observations on the mode by which the child, through the use of language, arrives at forming abstractions of actions:—

"It would certainly seem easy to understand how the child learns to name material objects. When they have been shown to him, certain sounds being uttered at the same time, the thing recalls the idea of the word, and the word that of the thing. But it is more difficult to understand how he comes to attach a sign to that which has no corporeal existence. The actions, for instance, which are always expressed or supposed by verbs, have no permanent type in nature.1 They do not fall under the senses of the child as he names them, and he says 'go,' when as yet there is no sign of going. He must have within him the idea expressed by the verb, and apply this idea, which is at once clear and elastic, successively to all that belongs to action. How, then, has he conceived a notion of this kind which seems one of the most subtle of abstractions? It would seem that he has derived it from gestures, actions being the natural objects of pantomime, which may be called the language of action. We use much unconscious gesticulation with children, and thus they learn to gesticulate themselves a great deal. Hence, when a certain word always accompanies certain movements,2 the two ideas become connected in their minds

¹ Hence, when they are named, it is by an abstraction; to walk, for example, is not a special act of walking done by some man once, but to walk in general, to walk as men commonly do, though each time they walk it will be differently from the time before.

² These movements being always different and varied, we require an abstraction to fix them in our minds with a type common to all.

"It is true that words which are verbs to us are not always so to them. Thus, to drink means to them water or milk; to go out walking, the open air or the door. But as soon as they begin to require that the action should follow the word, the action assumes a greater consistency in their minds, and they end by really attaching the sign to it. Children, like negroes, at first use only the infinitive. Not having yet formed any idea of time, and not understanding pronouns till much later, they are reduced to the infinitive mood."

These observations are full of truth, and of rare sagacity.

SECTION 3. — Catathetical 2 Ratiocination at this period.

262. The synthetical judgments of this period are the result of a catathetical ratiocination, performed by the child's mind. For example, when the child judges to be good the food he sees preparing for him, he conceives in his little brain a discourse, which, if it were put into propositions, would assume this form: "What I now see is like what I saw before; but what I saw before was pleasant to my taste and my stomach; therefore, this which I see now is pleasant for my taste and my stomach." The child is quite unable to express such propositions; but their substance undoubtedly passes through his mind.

But, although the child, at the age we are speaking of, is capable of catathetical reasoning, and thus of rising to the third order of cognitions, he is as yet incapable of conceiving hypothetical or disjunctive reasoning, because both these forms require that the major premiss shall be composed of two predicates compared with each other, of which the one

¹ Mad. Necker de Saussure, L. II., c. vi.

² We call those catathetical judgments, or judgments of position, those in which the major premiss is absolute, without any conditional expressed or implied. Others have called such reasonings categorical; but we have been obliged to depart from this nomenclature for the sake of clearness of expression, and have reserved the word category to signify a division of things wide enough to include genera, as will be seen more clearly in the Ontology.

implies or excludes the other. Now, he possesses predicates indeed, but to compare them and discover the relation between them requires a higher order of cognitions, as we shall see in the following sections.

ARTICLE IV.

OBJECTS OF THE COGNITIONS OF THE THIRD ORDER.

SECTION 1. - Reality and Ideality.1

(A.) Collections, numbers.

263. What, then, are the objects which man comes to know through the processes indicated as belonging to the third order? We will point out some of the principal classes of such objects:—first the real, then the ideal, and, finally, the moral. Let us begin with the first.

Among real objects, we must first examine the progress made by the mind in the conception of collections.

The sensistic and the Scotch schools confounded together abstractions and collective ideas, which are entirely different.² Abstractions form the basis of collections, but are not collections. I could not have the idea of a flock of sheep, if I had not first the abstract idea of a sheep, to which each sheep in the flock conformed; for a collection is only a multiplicity of things like each other in certain respects.

264. Let us see, then, by what steps the mind arrives at the conception of collections.

On first seeing several things together, or feeling them simultaneously, the child forms no idea of collection or plurality or difference. Granting that his understanding arrives at *perception*, and, consequently, that such sensations do not remain mere sensible phenomena, it does not follow that he derives from them at first the above-mentioned conceptions

¹ It seems to me well to speak of these two categories of objects together rather than separately, on account of their close relation to each other.

² See New Essay, nos. 142 and foll.

of multiplicity, etc. All that can be said is, that, when the child sees two things before him, he has a different perception from that which he has when he sees only one. does not follow that the child distinguishes, in the first case, two objects; in the second. only one; he distinguishes only two different perceptions, which he is as yet unable to analyze. Multiplicity is conceived only when we can distinguish and separate the units which compose it; but when these units are perceived at once, and, according to the expression of the Schools, per modum unius, the mind gains no conception of collections. The difference between the perception of an object and the perception of several objects was what deceived Bonnet into believing he had grounds for stating that ideas of collections are formed by the action of sensible objects on our organs, as, according to his belief, our simple ideas are also formed. We, on the contrary, while granting that the impression received by the child's organs at the sight of a flock of sheep is widely different from that which he receives from the sight of a single sheep, entirely deny that the difference consists in the former's corresponding to a collective idea, and the latter's to the idea of a single thing: both are simple impressions, the one more varied than the other, but not conveying as yet to the mind any true idea of collection.

This error of Bonnet's proves that he was unacquainted with the true nature of collective ideas, and did not think it necessary to investigate it. Having observed the difference of the impression made by collections of things, from that made by a single thing, he concluded that the nature of the collective idea consisted simply in that difference of impression.

The system of sensistic philosophy could not preserve Bonnet from this error; for, as that system makes no essential separation between sensation and cognition, it was im-

¹ See Essai Analytique sur les facultés de l'âme, §§ 201, 205, 214.

possible for him to perceive that the understanding does not take in at once all that the sensation contains, but arrives at it little by little. We have seen 1 that the understanding at first perceives only the resistance of body, whence it discovers entity; and only afterwards attends to the sensible qualities of the entity, which for a long while remain in the sense only, — felt indeed, but not cognized by the subject. Moreover, we have seen that the understanding, in each of its acts, perceives as little as possible; that is, it perceives only so much, and no more, of the sensible object, as it is constrained to perceive by its immediate need, - which is the stimulus that awakens and spurs it on to action. Even if the two sensations of a collection of things and a simple thing could give the material out of which the understanding might form the idea of collection and the idea of unity. it would by no means follow that it would in fact soon form such ideas; it will form them when the intelligent subject feels the want of them, and not a moment sooner. It is in any case the duty of the philosopher to describe all the processes of the understanding, in working out and putting together ideas from the material furnished to it by the senses. This, then, is what we have to investigate.

265. To begin with: the analysis of the idea of a collection gives these certain results: (1) that such idea presupposes in the mind of the child that possesses it the knowledge of what a unit is; (2) that the child also knows that several units are gathered together in the same place (to take only collections of the simplest kind). This second contains a third, i. e., the likeness in certain respects of the units forming the collection; for no collection can be formed of things entirely and totally different.²

¹ See above, where we have spoken of the successive improvement which takes place in the intellectual perceptions (nos. 104 and foll.)

² That we are always able to conceive a collection of several things arises from

it is not to be assumed that the conception of control in its shuttener forms as vicessed v the vord, enters early into the sind fitte mid. Heat most xists implicitly in within which a given in the natural light of the mind. and, therefore, the mild supposes and adopts it, but withant giving any attention to a simply because he closs not vent such a office distraction. Nevertheless, when he hears the words, one thing, two things, - and here language again names to its sid. — he learns after a while that the two things the the same thing repeated. To pronounce mentally "a following judgment: These things which I see are two. a complicated peration. We may onsider it first as an analysis of the single sensible impression which represents the we objects. The mind goes back to that impression. spreading it, and distinguishes in it one object from the other. But in order to to this, the mind must have heard the common name of the two objects, let us say vear, must have neard it applied to both the one and the other, and must name expresses what is common to 10th. The common quality of the two objects must be aggregated with that name, and, therefore, must have been abstracted from the individuals. Even then it cannot be sold that the mind has succeeded in forming the judgment: These are two objects. - because the common quality, assoelated with the name, is one and does not suppose a duality; and the circumstance that it has been deduced from several objects does not necessitate retaining in the mind the plurality of the objects, each one of which may have left the impression of its common element, without the mind's having considered them together and noted their numerical relation. But when the child, having already in his mind, on the one

their being always alike, at least, in their universal aspect, as things, entities. Nevertheless, I think an idea and a thing could not together form any plurality or any collection, because they differ from each other categorically.

hand, the common quality associated with the name, say of pear, and, on the other, hears repeatedly the words, one pear, two pears, and sees these objects before him, he ends by attaching a meaning to the words one and two, and by fixing his attention on the unity and on the quality of the pears.

If we consider this succession of processes by which the mind arrives at conceiving the duality of objects, we shall easily perceive that such a conception is not possible for it until it has reached the third grade of cognitions. And, in fact, the perception of abstract quality belongs, as we have seen, to the second grade. To reflect on the numerical relation between the objects having the same abstract quality is manifestly a further step in reflection, i. e., a cognition of the third grade.

266. Here it will be best that we should point out how the mind passes to the conception of the numbers beyond two. For although, as requiring the passage to higher and higher orders of cognition, it would seem to belong rather to the following sections, yet I think the argument will be made clearer if we put together here all that belongs to the cognition of numbers.

It is evident that, for the numbers three, four, five, etc., the same process has in part to be gone through as for the conception of two. We always require the words which shall fix the trinity of things, the quarternity, etc. Moreover, we cannot go on to number three objects, till we have previously numbered two, or form the conception of four unless we have first conceived three. This shows that each number belongs to a higher order of cognition, so that the mind is forced to pass through as many grades of cognition

¹ Aristotle says that one number differs from another specifically. I think that he held this opinion, which was also adopted by the Schoolmen, on this ground, that the different numbers cannot be classed as belonging to the same grade of cognition, although he had not clearly apprehended this truth.

as there are numbers of which it is able to form a distinct idea. I say 'a distinct idea,' for it is by no means to be assumed that man has a distinct idea of every number the name of which he pronounces. Who has any distinct idea of a million, or even of a thousand? I believe, on the contrary, that we must descend to an extremely small number, to find one of which men, even educated ones, form a distinct idea of their own, unassisted by some general formula.

267. And, in fact, I believe it would be impossible for men even to name the very high numbers, if there were no other way of arriving at the conception of them than the one we have pointed out, i. e., by analyzing the perception received from collections of objects, enumerating the distinct units in them, and then noting the relation of the second unit to the first, of the third to the first two, of the fourth to the first three, and so on, through all the orders of collection to which the numbers belong. The mind, instead, helps itself by the use of general formulæ, which, though they cannot give the distinct idea proper to a given number, give, at least, the idea of a relation between an unknown number and a known one, and the knowledge of these relations is sufficient to give implicitly the idea of the former, because it gives the elements by the use of which we can find it. For instance, - if I do not know the number 1000 in itself, but know that it is equal to 10 times 100, I know it implicitly through my knowledge of 10 and 100. So, again. 'I do not know the number 100, but know that it is 10 times 10, I have implicitly the knowledge of 100, in my knowledge of 10 and its relation to 100. Or if I do not know 10 by itself, but yet know that it is twice 5, I know it implicitly through my knowledge of 2 and 5 and their relation to 10. If, finally, I did not know 5, but yet knew that it is a number composed of twice 2 plus 1, I should have the implicit knowledge of it in my knowledge of 1 and 2 and

the relation between them. Hence, if I know 1 and 2 and the relations above mentioned between the other numbers, I should say that my knowledge of 1 and 2 is proper and distinct; but that my knowledge of the other numbers is, on the contrary, implicit and expressed in formulæ.

From this example it will be easily seen that the mind arrives much more rapidly at the knowledge of numbers through formulæ than at the proper and distinct knowledge of each number by itself, since, by the method described, it arrives, through four stages of reflection, at the knowledge of 1000, whereas to attain to a distinct and proper knowledge of it would require a thousand stages of reflection, — a thing almost impossible to man.

Now the science of the relations of numbers is arithmetic, and hence it is the one which prepares the way for the child's advance in the knowledge of numbers.

268. It may, perhaps, be asked: What is the first formula found by the child for its advance in the numerical scale, and to what order does it belong? The following is my view of it.

Let us go back to our collective perception: The child having already mastered the knowledge of one and two, sees, say, a detachment of thirty-two soldiers: the simplest way by which he can manage, if not to count, at least to go over their number, and divide them one from the other, will be as follows:

His perception of the detachment is, in the first place, a single one; but he is already capable of fixing his attention on one of the soldiers. He becomes aware that the detachment is not a single soldier; for he sees, besides the one soldier he has distinctly observed, something else which he calls two. But this two resembles rather his perception of the whole detachment than the one soldier he has considered apart. He can thus repeat the operation, taking another

soldier from the group that remains, and so on, taking each time one soldier from the remainder, till he has gone through the whole number. After all, he does not yet know the number of the soldiers; but he has gone over them one by one; he has always had two objects present to him; he has learned that one and two can be repeated as often as he chooses, and this is a new and important piece of knowledge to him. If he likes to carry on his reflections, he can form two groups of soldiers, and then two more out of these, and so on till he finds the relation of 2 to 32, or, if he expressed the idea of 32 through the number 2 only, his formula would be $2 \times 2 \times 2 \times 2 \times 2$ equal 32.

269. It is easy to see, from this example, how great a step is the number 2 for the infant mind, since that number is the basis of all numeration and primitive arithmetic, — every number whatsoever being composed of 1 and 2, and their combinations once or twice repeated.

This importance of the number 2 in human knowledge explains, if I mistake not, why, in the oldest languages, there is a special termination for the dual, which is not confounded with the plural, as in modern languages. It is true that the dual in those ancient languages is applied mostly to those objects which are naturally pairs, as the eyes, the lips, the hands, the feet, the millstones, etc.; but this itself shows the special attention given by the primitive mind to double things, and how, when it has learned from them the number two, the door is open for all other numbers which it comprised indefinitely under a common plural termination.

(B.) First Definite Principles drawn from the Ideas of Things.

270. Another product of the intellectual processes in the child's mind at this age is that of the primary definite principles which it acquires, and of which it makes use in forming judgments.

We must first understand clearly what is a principle or rule of judgment: it is no other than an idea applied by means of a judgment. When, on seeing an object, I pronounce it to be a plant, I apply the idea of the plant to the object I see, and my judgment is simply a proposition in which I affirm that I have found in the object seen that which I contemplated in the idea. The idea of the plant is the standard which I follow in forming my judgment.

This being ascertained, it follows that there are as many principles as ideas; ² and the principles are wide or narrow, exactly as the ideas of which they are the application.

271. Man, human nature, is formed by one idea only (the intuition of being). If he had none, he would not be an intelligent being; for the act characteristic of intelligence is judgment, and judgment is only the application of an idea. When, therefore, the human being begins to use his intelligence in forming his first judgments, he can form them only by the one idea he possesses,—that of existence; hence, before judging anything else, he judges that a thing exists, he affirms its existence.

When he pronounces intellectually the existence of a real thing, applying to it an idea (intellectual perception), that idea serves as his *principle*. From his earliest intellectual acts, then, man has in his mind a principle by which he can pronounce a judgment; for every judgment presupposes a standard which is applied in judging.

Nevertheless, this principle by which man judges that real things exist (perception) is an indefinite and unlimited principle, for it can be applied equally to all real, sensible things, and it is this indefiniteness that distinguishes it from the

¹ This definition of principles is of the utmost importance. We have already laid it down in the New Essay, nos. 576 and foll.

² It must be remembered, as I have so often said and proved, that all ideas are universal. Ideas must never be confounded with feelings or perceptions, which alone are particular.

definite principles which, in my belief, do not make their appearance till the child has reached the third order of cognitions.

In the first order we find only perceptions and imaginal ideas. Perceptions cannot be used as principles, on account of being always particular, and the same must be said of the remembrance of them. *Imaginal ideas* might be so used, since they are universal; but as no more individuals exactly alike are to be found, they have no possible application. Moreover, they could be applied only on the repetition of past perceptions; but the latter could not require them as their standard, the ideas being, in fact, the effect of the perceptions themselves.

272. The second order of cognitions supplies abstract ideas, but goes no further than providing the mind with this supply and preparing the way for the third order of cognitions. And, in fact, the mind, when it applies to the judgment of things the ideas supplied through the second order of cognitions, performs precisely the operation by which it rises to the third order.

Now, these principles are definite, because the abstract and semi-abstract ideas supplied by the second order of cognitions all have a limitation; they do not embrace being in general, but limited being, circumscribed within more or less extended confines. The abstract idea of food, dog, etc., are not applied to all beings; but serve only for the recognition of all such entities as are food, all such as are dogs, etc.¹ These ideas become, therefore, in their application, more restricted than the idea of being in general.

¹ The art of applying an idea is itself learned gradually by the child, and requires certain circumstances favorable to it. For the child to judge that a thing is food, it is not enough that he should have the idea of food, but he must have some experience of the thing seen, to enable him to recognize it as food.

SECTION 2. - Morality, or Moral Rules.

273. Let us pass on now from theoretical judgments to the practical moral principles which guide the child's actions.

It is a mistake to suppose that the child has no rules of morality, — a mistake included in the common and most ancient prejudice, that the child has no use of reason, said reason appearing, according to the vulgar, quite suddenly, and as if by magic, at the age of seven years.

The whole tendency of the present work is to destroy this unfortunate popular error. And, as regards the rules of morality, we have seen that the child gives signs of them as early as the second order of its cognitions. The earliest of all such rules may be reduced to two, which we have formulated thus: 1. "That which is beautiful, animated, and intelligent deserves admiration." 2. "That which is beautiful, animated, and intelligent deserves benevolence." Not that the child has yet any idea of merit; but, his nature being intelligent and moral, he feels the consequent necessity of admiring and loving this beautiful, animated, intelligent thing, which he perceives by his sensations, and with which he is in vital communication.

274. What modifications do these laws intrinsic to the child's moral nature undergo, when he reaches the third order of cognitions? Do they cease to be? Do they lose their force? Are others added to them?

The moral nature of man can never lose its primary laws; it will always feel the need to admire and to love that which is beautiful, animated, and intelligent, and only through violence or perversion will it cease to do so. But it is true that, besides these primary laws, others will arise in the human soul. Each age, each order of cognition, has its moral rules; their aim, their essence, remain the same; for all tend to prescribe esteem and love for what is beautiful,

animated, and intelligent; but they lead man to this common end by different ways; they speak to him an ever new language, suited to the new condition of his mind: man believes that he is always gaining new moral maxims, when in fact it is always the same immutable, eternal maxim taking new forms in his mind, manifesting itself anew. We must, then, follow these manifestations, these ever fresh expressions of moral duty, generated in the human mind with each new order of cognition; and this is what we now purpose to do as regards the third of these orders.

275. What, then, are the rules of morality for the child, when it has reached this third order?

Admiration and benevolence were already born in him in the second order. These impulses, which were effects of the primary laws of his nature, change, with his entrance into the third order, into moral rules which run as follows:

That which is in conformity with what I admire is good.

That which is in conformity with what I love is good.

That which is contrary to both is bad.

That which neither conforms nor is contrary to what I admire and love is indifferent.

276. These moral rules of the fourth period of childhood differ widely from those earliest rules which govern the child in the preceding period. We have already seen that the persons under whose control he lives can largely influence the development and direction of his admiration and benevolent affections. By exercising this influence in their every word and deed, they can narrow or widen the sphere of childish benevolence; they can excite in the infant mind the feeling of malevolence; inspire it with aversion for certain objects, and desire for certain others. We pointed out before how important it is to keep out of children's minds the perception and thought of evil, that is, of the morally ugly, and to labor to fill them only with love and admiration, so that

these affections may preserve the widest possible range. I believe that, in this way, an immense influence may be exercised towards insuring a moral and virtuous life in manhood, and towards preventing the growth of the passions by which manhood is most fiercely assaulted. But the happy influence of this earliest moral education shows itself at once in the next intellectual period; for on it depends whether the moral standards which the child forms for himself at that age shall be true or false, in harmony with, or opposed to, the nature of things, shall deceive him or lead him aright.

It is evident that, if his moral standards are those we have named above, i. e., "That is good which is in conformity with what I admire or love," and, "That is bad which is opposed to what I admire and love," etc., the child's rules of action will be true or false, right or wrong, according as his admiration and love have been ill or well directed and The character of the moral rule will clearly depend on the moulding of his mind through the preceding Hence we see the importance of making sure that the earliest impression on his soul, the earliest springs of esteem and affection laid there, should be wholly pure and natural, neither falsified nor altered by art, nor corrupted by ignorance or malice. For, if the moral rules which guide action are themselves falsified and warped by the first wrong impression made on his mind, how shall the child, with false standards, before his eyes, guide himself aright? Even with the wish to go right, he would not have the power. Parents and teachers continually exclaim about the natural perversity of children; but this perversity is not always a physical necessity, an innate evil. It seems so only because we do not see the secret workings continually going on in their little minds, by which their estimate of things has been thoroughly falsified: false principles have got into their little heads, which they obey faithfully before they can ex-

It is not to be assumed that the conception of unity in its abstract form, as expressed by the word, enters early into the mind of the child. Ideal unity exists implicitly in entity, which is given in the natural light of the mind. and, therefore, the child supposes and adopts it, but without giving any attention to it, simply because he does not want such a lofty abstraction. Nevertheless, when he hears the words, one thing, two things, - and here language again comes to his aid, -he learns after a while that the two things are the same thing repeated. To pronounce mentally the following judgment: These things which I see are two. is a complicated operation. We may consider it first as an analysis of the single sensible impression which represents the two objects. The mind goes back to that impression. perceives it, and distinguishes in it one object from the other. But, in order to do this, the mind must have heard the common name of the two objects, let us say pear, must have heard it applied to both the one and the other, and must have understood that this name expresses what is common The common quality of the two objects must be associated with that name, and, therefore, must have been abstracted from the individuals. Even then it cannot be said that the mind has succeeded in forming the judgment: These are two objects, - because the common quality, associated with the name, is one and does not suppose a duality: and the circumstance that it has been deduced from several objects does not necessitate retaining in the mind the plurality of the objects, each one of which may have left the impression of its common element, without the mind's having considered them together and noted their numerical relation. But when the child, having already in his mind, on the one

their being always alike, at least, in their universal aspect, as things, entities. Nevertheless, I think an idea and a thing could not together form any plurality or any collection, because they differ from each other categorically.

hand, the common quality associated with the name, say of pear, and, on the other, hears repeatedly the words, one pear, two pears, and sees these objects before him, he ends by attaching a meaning to the words one and two, and by fixing his attention on the unity and on the quality of the pears.

If we consider this succession of processes by which the mind arrives at conceiving the duality of objects, we shall easily perceive that such a conception is not possible for it until it has reached the third grade of cognitions. And, in fact, the perception of abstract quality belongs, as we have seen, to the second grade. To reflect on the numerical relation between the objects having the same abstract quality is manifestly a further step in reflection, i.e., a cognition of the third grade.

266. Here it will be best that we should point out how the mind passes to the conception of the numbers beyond two. For although, as requiring the passage to higher and higher orders of cognition, it would seem to belong rather to the following sections, yet I think the argument will be made clearer if we put together here all that belongs to the cognition of numbers.

It is evident that, for the numbers three, four, five, etc., the same process has in part to be gone through as for the conception of two. We always require the words which shall fix the trinity of things, the quarternity, etc. Moreover, we cannot go on to number three objects, till we have previously numbered two, or form the conception of four unless we have first conceived three. This shows that each number belongs to a higher order of cognition, so that the mind is forced to pass through as many grades of cognition

¹ Aristotle says that one number differs from another specifically. I think that he held this opinion, which was also adopted by the Schoolmen, on this ground, that the different numbers cannot be classed as belonging to the same grade of cognition, although he had not clearly apprehended this truth.

as there are numbers of which it is able to form a distinct idea. I say 'a distinct idea,' for it is by no means to be assumed that man has a distinct idea of every number the name of which he pronounces. Who has any distinct idea of a million, or even of a thousand? I believe, on the contrary, that we must descend to an extremely small number, to find one of which men, even educated ones, form a distinct idea of their own, unassisted by some general formula.

267. And, in fact, I believe it would be impossible for men even to name the very high numbers, if there were no other way of arriving at the conception of them than the one we have pointed out, i. e., by analyzing the perception received from collections of objects, enumerating the distinct units in them, and then noting the relation of the second unit to the first, of the third to the first two, of the fourth to the first three, and so on, through all the orders of collection to which the numbers belong. The mind, instead, helps itself by the use of general formulæ, which, though they cannot give the distinct idea proper to a given number. give, at least, the idea of a relation between an unknown number and a known one, and the knowledge of these relations is sufficient to give implicitly the idea of the former, because it gives the elements by the use of which we can For instance, — if I do not know the number 1000 in itself, but know that it is equal to 10 times 100, I know it implicitly through my knowledge of 10 and 100. So, again. 'I do not know the number 100, but know that it is 10 times 10, I have implicitly the knowledge of 100, in my knowledge of 10 and its relation to 100. Or if I do not know 10 by itself, but yet know that it is twice 5, I know it implicitly through my knowledge of 2 and 5 and their relation to 10. If, finally, I did not know 5, but yet knew that it is a number composed of twice 2 plus 1, I should have the implicit knowledge of it in my knowledge of 1 and 2 and

the relation between them. Hence, if I know 1 and 2 and the relations above mentioned between the other numbers, I should say that my knowledge of 1 and 2 is proper and distinct; but that my knowledge of the other numbers is, on the contrary, implicit and expressed in formulæ.

From this example it will be easily seen that the mind arrives much more rapidly at the knowledge of numbers through formulæ than at the proper and distinct knowledge of each number by itself, since, by the method described, it arrives, through four stages of reflection, at the knowledge of 1000, whereas to attain to a distinct and proper knowledge of it would require a thousand stages of reflection, — a thing almost impossible to man.

Now the science of the relations of numbers is arithmetic, and hence it is the one which prepares the way for the child's advance in the knowledge of numbers.

268. It may, perhaps, be asked: What is the first formula found by the child for its advance in the numerical scale, and to what order does it belong? The following is my view of it.

Let us go back to our collective perception: The child having already mastered the knowledge of one and two, sees, say, a detachment of thirty-two soldiers: the simplest way by which he can manage, if not to count, at least to go over their number, and divide them one from the other, will be as follows:

His perception of the detachment is, in the first place, a single one; but he is already capable of fixing his attention on one of the soldiers. He becomes aware that the detachment is not a single soldier; for he sees, besides the one soldier he has distinctly observed, something else which he calls two. But this two resembles rather his perception of the whole detachment than the one soldier he has considered apart. He can thus repeat the operation, taking another

soldier from the group that remains, and so on, taking each time one soldier from the remainder, till he has gone through the whole number. After all, he does not yet know the number of the soldiers; but he has gone over them one by one; he has always had two objects present to him; he has learned that one and two can be repeated as often as he chooses, and this is a new and important piece of knowledge to him. If he likes to carry on his reflections, he can form two groups of soldiers, and then two more out of these, and so on till he finds the relation of 2 to 32, or, if he expressed the idea of 32 through the number 2 only, his formula would be $2 \times 2 \times 2 \times 2 \times 2$ equal 32.

269. It is easy to see, from this example, how great a step is the number 2 for the infant mind, since that number is the basis of all numeration and primitive arithmetic, — every number whatsoever being composed of 1 and 2, and their combinations once or twice repeated.

This importance of the number 2 in human knowledge explains, if I mistake not, why, in the oldest languages, there is a special termination for the dual, which is not confounded with the plural, as in modern languages. It is true that the dual in those ancient languages is applied mostly to those objects which are naturally pairs, as the eyes, the lips, the hands, the feet, the millstones, etc.; but this itself shows the special attention given by the primitive mind to double things, and how, when it has learned from them the number two, the door is open for all other numbers which it comprised indefinitely under a common plural termination.

(R.) First Definite Principles drawn from the Ideas of Things.

270. Another product of the intellectual processes in the child's mind at this age is that of the primary definite principles which it acquires, and of which it makes use in forming judgments.

We must first understand clearly what is a principle or rule of judgment: it is no other than an idea applied by means of a judgment. When, on seeing an object, I pronounce it to be a plant, I apply the idea of the plant to the object I see, and my judgment is simply a proposition in which I affirm that I have found in the object seen that which I contemplated in the idea. The idea of the plant is the standard which I follow in forming my judgment.

This being ascertained, it follows that there are as many principles as ideas; ² and the principles are wide or narrow, exactly as the ideas of which they are the application.

271. Man, human nature, is formed by one idea only (the intuition of being). If he had none, he would not be an intelligent being; for the act characteristic of intelligence is judgment, and judgment is only the application of an idea. When, therefore, the human being begins to use his intelligence in forming his first judgments, he can form them only by the one idea he possesses,—that of existence; hence, before judging anything else, he judges that a thing exists, he affirms its existence.

When he pronounces intellectually the existence of a real thing, applying to it an idea (intellectual perception), that idea serves as his *principle*. From his earliest intellectual acts, then, man has in his mind a principle by which he can pronounce a judgment; for every judgment presupposes a standard which is applied in judging.

Nevertheless, this principle by which man judges that real things exist (perception) is an indefinite and unlimited principle, for it can be applied equally to all real, sensible things, and it is this indefiniteness that distinguishes it from the

¹ This definition of principles is of the utmost importance. We have already laid it down in the New Essay, nos. 576 and foll.

² It must be remembered, as I have so often said and proved, that all ideas are universal. Ideas must never be confounded with feelings or perceptions, which alone are particular.

definite principles which, in my belief, do not make their appearance till the child has reached the third order of cognitions.

In the first order we find only perceptions and imaginal ideas. Perceptions cannot be used as principles, on account of being always particular, and the same must be said of the remembrance of them. *Imaginal ideas* might be so used, since they are universal; but as no more individuals exactly alike are to be found, they have no possible application. Moreover, they could be applied only on the repetition of past perceptions; but the latter could not require them as their standard, the ideas being, in fact, the effect of the perceptions themselves.

272. The second order of cognitions supplies abstract ideas, but goes no further than providing the mind with this supply and preparing the way for the third order of cognitions. And, in fact, the mind, when it applies to the judgment of things the ideas supplied through the second order of cognitions, performs precisely the operation by which it rises to the third order.

Now, these principles are definite, because the abstract and semi-abstract ideas supplied by the second order of cognitions all have a limitation; they do not embrace being in general, but limited being, circumscribed within more or less extended confines. The abstract idea of food, dog, etc., are not applied to all beings; but serve only for the recognition of all such entities as are food, all such as are dogs, etc.¹ These ideas become, therefore, in their application, more restricted than the idea of being in general.

¹ The art of applying an idea is itself learned gradually by the child, and requires certain circumstances favorable to it. For the child to judge that a thing is food, it is not enough that he should have the idea of food, but he must have some experience of the thing seen, to enable him to recognize it as food.

SECTION 2. - Morality, or Moral Rules.

273. Let us pass on now from theoretical judgments to the practical moral principles which guide the child's actions.

It is a mistake to suppose that the child has no rules of morality, — a mistake included in the common and most ancient prejudice, that the child has no use of reason, said reason appearing, according to the vulgar, quite suddenly, and as if by magic, at the age of seven years.

The whole tendency of the present work is to destroy this unfortunate popular error. And, as regards the rules of morality, we have seen that the child gives signs of them as early as the second order of its cognitions. The earliest of all such rules may be reduced to two, which we have formulated thus: 1. "That which is beautiful, animated, and intelligent deserves admiration." 2. "That which is beautiful, animated, and intelligent deserves benevolence." Not that the child has yet any idea of merit; but, his nature being intelligent and moral, he feels the consequent necessity of admiring and loving this beautiful, animated, intelligent thing, which he perceives by his sensations, and with which he is in vital communication.

274. What modifications do these laws intrinsic to the child's moral nature undergo, when he reaches the third order of cognitions? Do they cease to be? Do they lose their force? Are others added to them?

The moral nature of man can never lose its primary laws; it will always feel the need to admire and to love that which is beautiful, animated, and intelligent, and only through violence or perversion will it cease to do so. But it is true that, besides these primary laws, others will arise in the human soul. Each age, each order of cognition, has its moral rules; their aim, their essence, remain the same; for all tend to prescribe esteem and love for what is beautiful,

animated, and intelligent; but they lead man to this common end by different ways; they speak to him an ever new language, suited to the new condition of his mind: man believes that he is always gaining new moral maxims, when in fact it is always the same immutable, eternal maxim taking new forms in his mind, manifesting itself anew. We must, then, follow these manifestations, these ever fresh expressions of moral duty, generated in the human mind with each new order of cognition; and this is what we now purpose to do as regards the third of these orders.

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That which is in conformity with what I admire is good.

That which is in conformity with what I love is good.

That which is contrary to both is bad.

That which neither conforms nor is contrary to what I admire and love is indifferent.

276. These moral rules of the fourth period of childhood differ widely from those earliest rules which govern the child in the preceding period. We have already seen that the persons under whose control he lives can largely influence the development and direction of his admiration and benevolent affections. By exercising this influence in their every word and deed, they can narrow or widen the sphere of childish benevolence; they can excite in the infant mind the feeling of malevolence; inspire it with aversion for certain objects, and desire for certain others. We pointed out before how important it is to keep out of children's minds the perception and thought of evil, that is, of the morally ugly, and to labor to fill them only with love and admiration, so that

these affections may preserve the widest possible range. I believe that, in this way, an immense influence may be exercised towards insuring a moral and virtuous life in manhood, and towards preventing the growth of the passions by which manhood is most fiercely assaulted. But the happy influence of this earliest moral education shows itself at once in the next intellectual period; for on it depends whether the moral standards which the child forms for himself at that age shall be true or false, in harmony with, or opposed to, the nature of things, shall deceive him or lead him aright.

It is evident that, if his moral standards are those we have named above, i. e., "That is good which is in conformity with what I admire or love," and, "That is bad which is opposed to what I admire and love," etc., the child's rules of action will be true or false, right or wrong, according as his admiration and love have been ill or well directed and cultivated. The character of the moral rule will clearly depend on the moulding of his mind through the preceding period. Hence we see the importance of making sure that the earliest impression on his soul, the earliest springs of esteem and affection laid there, should be wholly pure and natural, neither falsified nor altered by art, nor corrupted by ignorance or malice. For, if the moral rules which guide action are themselves falsified and warped by the first wrong impression made on his mind, how shall the child, with false standards, before his eyes, guide himself aright? Even with the wish to go right, he would not have the power. Parents and teachers continually exclaim about the natural perversity of children; but this perversity is not always a physical necessity, an innate evil. It seems so only because we do not see the secret workings continually going on in their little minds, by which their estimate of things has been thoroughly falsified: false principles have got into their little heads, which they obey faithfully before they can express them, and the origin of which no one could explain: no one, indeed, has actually instilled them; but their minds, which are never idle, and are always working out principles, following in this also their unalterable nature, go on constructing and confirming for themselves certain profoundly false persuasions, which secretly govern their conduct, and are the cause of their every action, down to the most capricious and inexplicable. They are the only beacons of the child's soul, which, guiding itself by their deceptive light, inevitably goes astray.

CHAPTER IV.

DEVELOPMENT OF THE ACTIVE FACULTIES IN THE FOURTH
PERIOD OF CHILDHOOD.

ARTICLE I.

INCREASE OF SPONTANEOUS ACTIVITY.

277. At the age which the child has now reached, we cannot yet speak of his actions as free, but only as spontaneous. In the Anthropology we have shown the wonderful laws which govern spontaneity, whether it be purely animal, or intellectual and moral.

Among the spontaneous volitions must be classed the affective, the estimative, and the appreciative. The affective and appreciative volitions already show themselves in the second period of childhood, through the first order of cognitions (132–136).

In the third period, the *estimative* volitions are manifested more explicitly through the second grade of cognitions (183, 184).

The development of these two kinds of volition continues through the fourth period; but the third kind, the appreciative, which requires the comparison of two or more objects, is still absent, and cannot be formed until the child has succeeded not only in counting two objects, which is done in the third order of cognitions, but also in comparing them together, and finding their differences,—a process which belongs, as we shall see, to the fourth order of cognitions.

278. The increase of affective and estimative volitions which takes place in the child implies a constantly increasing spontaneity, a constantly growing amount of effective activity. This spontaneous action, not being yet tempered and controlled by the free will wherewith the man governs himself, displays in its manifestations its own nature and laws.

I have shown that the following are the two principal laws of spontaneous action: (1) That it requires a stimulus to set it in motion. (2) That the activity produced is greater in proportion than the stimulus.¹

This superabundance of action is due partly to the activity of the mind itself, partly to the law of inertia, by which whatever has been set in motion continues to move till arrested by some other force. This law can be observed in the activity of children, and, as I am always in search of facts to lay before the reader, as the only trustworthy guarantees of what I affirm, I shall quote here the observations of one who assuredly had no thought of supporting my opinions:—

"The tendency of all the senses towards development, and to the overflow of life, as it were, from within outwards, produces in children a degree of external activity out of proportion to the inward motive impelling to it. Louisa certainly kisses me more than she loves me, as she cries more than she feels sorry, and laughs more than she feels glad; 2 and in every case the expansive

¹ See Anthropology, Nos. 392-400, 419-425, 443-454.

² There is often another cause for this exaggeration in children. They not only want to relieve themselves, but to make those around them share their feelings, and so try to make the latter appear stronger than they really are. We have here one of those instances of refined cunning which prove but too well that the childish nature is not altogether truthful. But we shall speak, further on, of the untruthfulness of children.

action, which is stronger than its cause, acts after the cause has ceased. Thus she goes on crying, though her pain is gone, and, when she has given vent to the craving for affection which brought her to me, she will go on pouring out her caresses on my chair or my table." 1

ARTICLE II.

DESULTORINESS OF ACTION.

279. Another characteristic of the child's activity is its desultoriness, the absence of connections in his acts of volition, and, consequently, in the external actions which are their result.²

If we admit the principle that all activity in man comes from a preceding passivity, and, in consequence, that all volitional activity follows on the conceptions of the intellect, we shall see that this absence of connection in his external movements and actions comes from the absence of connection in the child's ideas.

In the second period of childhood, the conceptions which excite and direct the intellectual attention⁸ are the perceptions, each of which is independent of every other. This want of connection in the child's actions does not, however, strike us so much at that age, because its activity is as yet feeble, and it attains its objects immediately.

In the third period, the activity of the child busies itself with abstractions also. These primary abstractions have no connection with each other; hence the corresponding ac-

¹ Mme. Guizot, Lettres de famille sur l'education, L. I.

² See Anthropology, Nos. 623-627.

³ It must be remembered that it is always of the activity of the will following intelligence that we speak. Contemporaneous with, and bound up in, this activity which belongs to the order of intelligence, there is also the animal activity. The latter has, indeed, a certain unity of its own, arising from the unity of the animal subject; but it is of slight importance, and escapes the observation of those who are seeking the more important unity which properly belongs to the rational subject. Moreover, the animal activity really diminishes with the birth and growth of the intellectual activity, and more and more escapes observation, as the latter is more and more engrossed by the rational activity, which soon becomes dominant.

tion is disconnected, and moves here and there, as from a thousand different centres. The greater the activity, the more disconnected it appears. At this age, action does not, as in the preceding one, attain its term, the real object it is seeking, immediately, but must pass through the intermediate step, that, namely, of the abstract idea.

In the fourth period, the child's active power goes on increasing in amount, and there is as yet nothing to make this evident, the principles of his action being infinite, i.e., as many as the ideas of which his acts are the application. As he proceeds in his development, these ideas will group themselves together, these principles of action will slowly become more general, and then the activity of the human being will of itself, and as if by magic, become an ordered activity, gathering itself together and drawing ever nearer to unity. Meanwhile, the adult is annoyed by this versatility of the child, which is incomprehensible to him, and he attempts to impose on the little creature the rules which most properly govern connected action, but are useless and inapplicable to a being who has not one impulse, but many, each wholly disconnected with the other; each by itself being unsusceptible of such rules, and each being unconscious of the others, so that they have no common existence. the cause of some of the greatest difficulties of the educator.1

Later on, we shall see how fancy enters into the activity of the child and increases its fickleness.

ARTICLE III.

PLAY.

280. To this desultory activity of the child belongs its play, in which there is a great deal of action and a con-

¹ Mad. Guizot shows how truly she has observed this when she notes the difficulty "de saisir et de retenir ces fils déliés et volages, dont la réunion doit former un jour le tissu de la raison, l'enchaînement de ses idées, l'ensemble de sa conduite L. I.

stant succession of unconnected, but ever new, impressions. The impulse towards motion of every kind is explicable also by animal instincts. Motion is pleasant and healthy for the animal, whose movements are certainly not governed by any rational principle, since none exists, but have each its reason and determination in the laws of animal nature.

To movements of this kind, apparently without any rule or motive but pleasure, we give the name of play, and consider them under a burlesque aspect, which inclines us to laugh. The animal, however, has no more sense of fun in them than in the taking of food. All that belongs to laughter is foreign to its nature. But the capricious disorder of such gestures and movements give us a sense of grotesque surprise which makes us laugh. The grotesqueness lies in these movements as compared with ordinary movements governed by reason, and the surprise, in the unexpectedness of their continual novelty and singularity.

281. The strange thing is that the child soon finds something laughable in his own play; this becomes more and more apparent to him as his reason develops, and is a new source of enjoyment. He laughs at what he does himself and sees other children do; yet it is not at himself that he is really laughing, for at himself he never laughs. It is the sign that he has become aware of the frivolity, the extravagance of his actions, and the educator should take advantage of this indication; he should foster and perfect the child's self-acquired sense of the incongruity between his sports and his dignity as a rational being, and use this consciousness to lead him to quiet and orderly behavior.

Hence, it is a mistake to applaud what is ridiculous in childish action. The natural movements may be allowed so long as they are produced by the animal nature, as it were, without the knowledge of reason; but, when reason inter-

venes and judges them as in a certain degree unworthy, they should be gradually left off, and the child should learn to feel ashamed of them. The educator should always add his influence to the child's own reason, to support and strengthen it. To this wild and unruly play should succeed the orderly exercises of gymnastics.

The play, however, which consists in the constant destruction of new things, is not found amongst animals; it belongs to man alone, who finds in it the delight of satisfying his curiosity and his eagerness to perceive and know things under every possible aspect. I have already said that this kind of play may be of use in developing intelligence, if the teacher knows how to take advantage of it; and it will become in his hands a real and delightful method of instruction in mathematics.¹

ARTICLE IV.

MORAL ACTIVITY.

282. At this age the moral activity of the child shows itself principally under two forms, the right of property and obedience. Both are the effects of the child's benevolence and admiration.

At the first stage of cognition, he neither possessed anything, nor obeyed; but he admired and loved. He had perceived intelligent beings and beautiful objects of his affection and admiration, with which he communicated through sympathy and the instinct of imitation, but without any understanding as yet of their thoughts or desires. Be it noted here that the sympathy and instinct of imitation, manifested in the animal order, belong also to that of intelligence. These laws, common to both the animal and intellective

¹ See Froebel's Kindergarten Gifts and Games, as supplying exactly the ordered and constructive play desired by Rosmini for children at this age. — Translator.

principles, are so admirably interwoven that the one passes into the other without any perceptible interruption.¹

283. Now, as soon as the child values and likes a thing, he conceives at once the sense of property; in other words, the thing becomes, as it were, spiritually united to him, and he resents its being taken from him, as if it were the loss of a part of himself.² The things belonging to those he loves are perceived by him together with them, and, therefore, he cannot bear to see them taken away; it is like taking away a part of the persons themselves (238). This feeling springs, in the first instance, from the animal unitive force (and similar phenomena may be noticed in animals); thus the will (the affective volitions) comes to the assistance of the natural animal desires; next, the understanding also perceives the advantage of contemplating levely things, and is pained if they are withdrawn from its contemplation; finally (and certainly very much later), the understanding arrives at a knowledge of the uses of the things, and values them for these also, after which the will clings to them with a new and less noble love than before,—the love of selfinterest. Out of these elements the material part of the right of property is gradually built up: its formal part can be given to it only by the sense of duty, the moral law.

¹ The instinct of imitation is communicated to the understanding even before the latter perceives through the affective volitions the things to be imitated. The animal instinct impels the whole sensitive and willing subject towards its object, because the subject wills that to which the animal instinct impels it, without knowing really what it is that it wills; it wants to make the animal operations easier, without knowing that, in doing so, it is imitating. The intellective sympathy acts more directly; the intelligent being inclines to take the form which it sees, or believes it sees, in another intelligent being, of which it has the perception. This again is, at first, aided by the instinct of imitation.

² The following facts show how the child perceives things associated together as one thing.—"No image stands alone in his mind," says an observer; "he does not separate the surroundings, the accessories, from the principal subject; they form part of his idea of it. I have seen a child nine months old cry bitterly and refuse its food because the cup, saucer, and spoon were not placed exactly as usual. It becomes a natural necessity to them (the children) to see everything in its place," etc.—MAD. NECKER DE SAUSSURE, L. III. c. i.

If in the first stage of cognition, the child perceives beauty in things, in the second, when they are taken from him he has the painful feeling of deprivation; in the third, he abstracts their action from the things themselves, and begins to value them for their uses, or at least is preparing himself to do so.

284. From the same source of admiration and benevolence springs, as I have said, the child's obedience.

In him obedience is only the wish and the will to conform himself to the intelligent beings which have become the objects of his affections. From the beginning, he strives after this conformity, through sympathy and intellective animal imitation. But, when he has reached the second order of cognitions, he acquires, in learning to speak, a new means of communication between his mind and the minds of those dear and precious to him. A new light dawns upon him; he can look into their minds, and there discover thoughts and will; with these he finds new ways by which he can unite and suit himself to them. These discoveries he makes by means of language, which he begins to learn in the second stage of cognitions, and goes on with through the following ones.

The key which language furnishes him in the third order of cognitions enables him to read the opinions and wishes of his fellow-beings. From his perception of these soon follow in the child belief and obedience.

Belief is in him only the wish, the tendency, to think the same as the persons he lives with.

Obedience, at first, is also a similar wish and tendency to be of the same mind with those around him.

In this their primitive form, the belief and obedience of the child arise, then, from his craving to be at one with those who are known to him.

285. This craving for uniformity felt by human souls, as

CHAPTER V.

THE INSTRUCTION CORRESPONDING TO THE COGNITIONS OF THE THIRD ORDER.

ARTICLE I.

WHAT IS MEANT MORE FULLY BY INSTRUCTION CORRESPONDING TO A CERTAIN ORDER OF COGNITIONS.

287. We come now to the instruction and moral education corresponding to the order of cognitions previously treated of. Although the reader knows generally what we mean by such instruction, I will put it into more definite terms, to avoid any misunderstanding or objection to the method I have laid down.

The instruction, then, corresponding to a given order of cognitions has three perfectly distinct parts:

- (1) The instruction which serves to increase in the mind of the pupil the number of cognitions he has gained in the preceding order and to make them more perfect.
- (2) The instruction which enables the pupil to pass from the order of cognition in which he finds himself to the next higher one.
- (3) The instruction which serves to exercise and perfect the pupil in the knowledge belonging to the order he has reached.

The important distinction between these three parts suffices to dispel any fear that our method will retard the progress of the human mind. On the contrary, it points out the most direct, the quickest, and the pleasantest way the mind can take in its natural progress.

ARTICLE II.

THE LANGUAGE AND STYLE TO BE USED BY THE TEACHER.

288. It is evident that the language and style of the teacher should vary according to the order of cognition

attained by the child. As language and its component parts involve a somewhat extensive range of cognitions, it follows that not every word of a language can be brought into use in speaking to a little child. Such words as cannot be classed under one or other of the three parts of instruction pointed out above, as suitable to his degree of development, i. e., those belonging to an anterior order of cognitions, those of the following order which his mind can reach at its next step, or those in that order which it has already reached, are simply wasted; and, being unintelligible to him, they only tend to confuse and disturb the progress of his ideas, like stones thrown across his path, and make it more difficult for him to understand even such words as are within the reach of his intelligence.

289. We have seen that the child, on arriving at the second order of cognitions, can understand nouns, and, at the third, verbs, but neither the declensions of the former nor the conjugations of the latter, which involve too much reflection on the relations of things. What he understands is the noun in its simplest form, and the verb in the infinitive mode, together with the participial forms in which the verb is still a noun, but one expressing action. At this stage, then, only such words and such forms must be used as presuppose no more than the next order of cognitions, to which the child's mind should now pass on, and which, in the present case, is the fourth. In talking to children, we must confine ourselves, as much as possible, to these words and forms, and through them we shall find and keep open the means of communication between our adult minds and theirs.

We may say the same of the manner of speaking and of the thoughts expressed to them. Neither should require cognitions beyond those of the fourth order, at most, and

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those which can be connected with such cognitions of the preceding order as already exist in the child's mind.

ARTICLE III.

MATTER OF INSTRUCTION.

SECTION 1. - Action.

290. The child at every age must act. His activity is, as we have seen, of three kinds: corporal, intellectual, and moral. He requires all three as means of development; but they should be properly directed.

As to the quantity of action, the activity natural to the child should be neither repressed nor excited, but only moderated, when its excess might endanger health.

As to quality, only such activity should be encouraged as is proportioned to the degree of knowledge attained. The difficulty is to ascertain exactly what that is.

As to regularity, two rules should be observed:

- (1) The order between the different kinds of activity, which subordinates and makes the corporal activity subservient to the intellectual, and both to the moral.
- (2) The order within each kind, securing in each uniformity, steadiness, and regularity,—in short, the utmost reasonableness possible.

To teach and guide the child in these things is really to educate him.

SECTION 2. - Oral Exercises.

291. Although the child might, so soon as he can speak a little, be taught to read, I think it preferable to keep him still in the *preparatory school* of oral exercises.

These exercises consist of two parts, the intellectual and the mechanical. Both should be combined in the exercises prescribed to the child.

I have already recommended (188 and foll.) that from

the second stage of cognition the child be made to name as many things as possible.¹

This exercise belongs to the *intellectual division*, and should be continued, not only now, but through many following stages of knowledge. Hitherto, the child has gone no further than *nouns*; but he should now be exercised in *verbs*² and in the other parts of speech, observing the same rules as before.

The mechanical exercise should now be joined to the intellectual and alternated with it. This exercise consists in correcting the pronunciation of children, and teaching them the perfect use of their organs of speech.

292. In fact, the first thing to be done, as soon as children begin to speak a little, is to teach them to bring out

1 Every thought of the child is complex, and he has not yet analyzed it. Hence, the first thing the child understands is the whole of what is said to him, i. c., the meaning of the whole sentence, not of the single words. This fact has been already noted. Some observations lead me to think that he (the child) does not separate them (the conjunctions and particles of the sentence) from the sentence of which they form a part. That sentence to him is one long word, the meaning of which he guesses through his wonderful sympathy, - a long word which he repeats distinctly, if his ear is true and his vocal organ docile, or which he mangles and shortens if they be not, but which he does not decompose. Even when he meets with the same words in different sentences he does not immediately recognize them. They remain to him what syllables are to us, which we meet with everywhere without attaching any meaning to them. Perhaps it is only reading that teaches us the real divisions of words. This is the reason why we find that the common people, who write without having read much, bind their words together, in the oddest fashion, and connect or disconnect them at random. (Mad. Necker de Saussure, L. II. c. ii.) Hence, by making the child listen to the separate words, we lead him to know the parts of speech. In this sense it is true that languages, as defined by Condillac, are so many analytical methods. Observe, in this action of the constructive intelligence of the child, a new phenomenon of the imitative force, be it animal or intellectual.

² The Abbate Aporti, in his *Manual*, places the verbs expressing the movements and sounds made by animals after their names, and thus makes verbs and nouns alternate closely on each other. I should place nouns and verbs as separate degrees of instruction, corresponding to separate ages or orders of cognition. At the third order, I should make the child repeat the names of the things learnt, and after these the adjectives, and then the verbs signifying the actions of those things. Here I would end the second table. In the third, I would go a step further, and so on.

the sounds correctly. At first, their utterance is very defective; they stammer, lisp, cut off syllables, strangle the sounds, etc.; and, before they are allowed to read or write, they should be made to pronounce correctly, and to overcome even the most difficult syllables.

Some excellent promoters of infant schools in Italy have already turned their attention to this matter, and have laid it down that children should be made to pronounce "clearly and correctly all the elementary sounds of which the entire words are composed." ¹

I believe we might commence this exercise with advantage by making the child sound the *musical tones*, taking first the natural scale and then the intervals, which, if his ear has been accustomed to them during the earlier period of infancy, will be already familiar means.²

This exercise should be followed by, or alternated with, the pronunciation of the vowel sounds articulated in speech.

The order in which the child should be made to pronounce the elementary sounds should be the same, I think, as that in which he will afterwards learn to read and write them; beginning, that is, with the vowels, then going on to the compounds of vowels, next to syllables composed of each vowel with every other letter of the alphabet, then to syllables of three letters, and so on.³

293. When the child has learnt to pronounce with perfect correctness all the letters, syllables, and words, he may pass

¹ See Il Manuale di educazione ed ammaestramento per le scuole infantili. Cremona, 1833. Parte II. c. i.

² Tunes, if perfectly simple, are easier for the infant than single notes, and should, therefore, come first, but be soon followed by the single notes, which are their elements. This would be an analysis required of the sense of hearing.

³ I must bring to the reader's notice in this place a singular coincidence of thought between Antonio Rosmini, Rafael Lambruschini, and Vincenzo Troia. The first laid down in 1839, as seen above, the logical principle on which pronunciation, and later on, reading, should be taught to children, while contemporaneously, the second at Florence, the third at Turin, were seeking the natural method of teaching both, and came to entire agreement with Rosmini, as may be seen

on to the *intellectual* part of the oral exercise. To this belong instruction in naming objects, as we pointed out before, and also the analysis of sounds. Aporti, in his *Manual*, gives a good example of this (Part II. art. v.), except that it seems to me too soon to speak to the child of diphthongs or triphthongs, and better to mention only plurality of sounds. It is simply impossible that he should understand what is meant by diphthongs and triphthongs, while the idea of two or three sounds is perfectly easy to him.¹

Thus it seems to me impossible to make him understand that ia in abbia is a diphthong, but is not one in ubbia; and Aporti's solitary example from ai does not prove it to be a diphthong rather than two single sounds; for it may be pronounced ai, ai, in which cases it is a diphthong, or ai, separating the syllables, when it is no longer a diphthong, but simply a double sound.

in the admirable spelling-book which they gave to Italy, both instances affording a proof that the earnest and patient seekers after truth will find her meeting them always and everywhere the same.—Fr. Paoli.

¹ A diphthong consists of two vowels pronounced at once. The addition made by Lambruschini to this definition, viz., "that the accent should be on one of the two, this more sustained and accentuated vowel drawing into itself and dominating the other, so as to become, as it were, the true vowel, whilst the other, absorbed and overcome, plays the part of a consonant" (Guida dell' Educatore, nos. 31-32, fac. 218), seems to me not essential to the diphthong, although, probably, always true for Italian. In fact, in almost all other languages, except Italian, there are diphthongs in which the two vowels are so mingled and interpenetrated as to form a third sound, precisely because each one has lost its own. Greek scholars observe that in Greek there are three species of diphthong; in some the first vowel is long and the second shortened, as in φ , η , $\eta \nu$, φ , $\omega \nu$; in others the vowels are both short, or the first is long, according to the derivation, as in av, vi. Finally, there are others in which both vowels are short, as in at, et, ev, or, ov, and their mingled sounds are blended, as it were, in a third. According to the grammarians, the latter alone are proper diphthongs; the others they term improper. I will not say that the vowel which is shortened in the improper diphthongs plays the part of a consonant; but it is pronounced with a slighter movement of the lips, and uttered more rapidly in opening or closing them. Thus in ama the final a, which is the more slightly pronounced, escapes through the closing of the lips, while in abbia the vowel i, which is the shorter, escapes through opening them.

Moreover, if we are to base education on a strictly logical method, I think that we cannot speak of consonants as having a sound apart from vowels. They are but the beginnings or endings of sound, which beginnings and endings cannot exist without the sound, any more than a point without a line, or a line without a superficies, or a superficies without a solid. This being premised, I cannot think it right that the teacher, when he has pronounced the syllable bi, and asks the child how many sounds he has heard, should make him answer, as in the Manual of Aporti, two. He ought, rather, to answer one, as he certainly would do of

1 The vowel is formed by the voice coming out of the open mouth (by open mouth I mean the separation of the upper and under lip, so that the air, modified into sound, may freely pass through). But, if the voice is thrown out in the act of opening the mouth, that is, before it is quite open, and is sustained through the act of closing it, it finds an impediment either at the beginning or the end, and the modification it thus receives is called a consonant. Let the experiment be tried with the syllable ba or ab, and it will appear at once that the b is only the beginning or the end of the sound a, which finds an obstacle either in issuing from the lips, or in continuing as they close. What is true of the action of the lips in the labials (b, p, m, v, f) may be applied equally to the tongue and teeth in the dentals (d, l, n, t), to the tongue and palate in the palatals (c, q, i, s, z), to the tongue and throat in the gutturals (ch, gh, h, k, g). We must, however, distinguish from the consonants the nasal intonation and the aspirates, which are slight sounds, not distinctly vocalized, but supplementing the vowels in facilitating the pronunciation of the consonants. Whenever several consonants are joined in a syllable, as, when the first consonant is an s, or when the second is a p or an l, there is always an aspirate or a nasal intonation to enable them to be pronounced. For example, in sci,* sdo, sfa, sgo, etc., and in all others where s is the first consonant, we have the sibilant aspirate, which is necessary for the pronunciation of these united consonants. If m enters into the syllable, as in smo, etc., besides the sibilant, we have a certain degree of nasal sound before the m. In the syllables pra, cra, etc., there is a harsh aspirate before the r, which makes the sound tremulous. In cla, pli, there is a soft aspirate before the l, which makes the sound flow more gently. The double consonants, on the other hand, are not given by aspirates or nasal intonation, but simply by a slight pause interposed between them. These are the only instances in the Italian language of the accumulation of consonants. The word mnemonica, and some others of foreign origin, are pronounced with the nasal intonation preceding the letter m. An exception must be made for words where the r is followed by an l, as in Carlo, and in which the two consonants never form one syllable, although the l is the second continuous consonant.

[•] It must be remembered that all these examples are based on Italian pronunciation, and the reader should supply parallel ones from English syllables. — Translator.

himself, since that syllable is only a single sound. should, indeed, when he has given that answer, be made to pronounce first i, and then bi, and be asked if those are the same sound. He will, of course, answer that bi is a different sound from i, and must then be asked where the difference lies, at the beginning or at the end of the sound. Answer, At the beginning. And the sound ib, is that the same as ior bi? No, it is different. But where is it different from i? At the beginning or the end? At the end. And from bi? At the beginning. And this exercise should be continued through all the syllables. The child should be exercised in the decomposition of words into their sounds, i. e., their syllables, and in recognizing and noting their differences.1 This oral exercise will be a most useful preparation for reading, which will be taught next, and it will greatly assist the child in intellectual study.2

294. It is well also at this age to make him number like things, so that, in rising through the numerical scale, he may be led on to rise through the various orders of cognition. This implies a more rapid advance than would seem due from the fact we have previously observed, that each number belongs to a different order of cognition. But the reason

The same must be done with the syllables ab, eb, ib, ob, ub; bab, beb, bib, bob, bub, and so on with every consonant, letter by letter. When we come to the joining of several consonants, the child must learn the use of the aspirates and the nasal tone. But more will be said in its proper place on the subject of reading.

¹ The noting of differences belongs to the next order of reflections; but this exercise will help the child admirably to rise in the intellectual scale, as also will arithmetical exercises.

² In teaching to read, the gradual steps must be as follows:

^{1.} Show how the vowels are written.

^{2.} Show how two, three, or more vowels joined together are written.

^{3.} Go on to the syllables having one consonant only, such as ba, be, bi, bo, bu, making the child observe how these five sounds are each modified at the beginning by the same check to the voice, and then making him understand that this modification may be indicated by a sign placed before each. Let the sign, for example, be a stop, a, e, i, o, u; make him pronounce ba, be, bi, bo, bu, and then establish that b is the figure by which that modification is signified.

of this rapidity is found in the extremely simple formula by which he quickly learns to pass from one number to another. This formula consists in always adding a unit to the things already numbered. He repeats the same operation, signifying it by a new number. When he says one and one is two, two and one is three, three and one is four, and so on, he has not at all the distinct cognition of two, three, etc., which he names and distinguishes by this repeated operation; but, without attending to the sum accumulated, he adds to it a unit and gives it another name. Even so, this is a useful exercise for the child, and we may, at first, give him for the purpose two similar objects, balls or the like, then three, then four, etc., letting him play with them till he has got together the number we want him to learn. Other exercises of the kind are mentioned in the Manual for Infant Schools 1 (Part II. art. V.)

SECTION 3. — Teaching by Pictures.

295. The child may also be taught at this age by pictures, which he is fond of and takes great delight in.² Amongst other advantages to be derived from their use might be that of preparing him for the reading and writing lessons, soon to follow. The earliest mode of writing seems to have been pictorial; this was afterwards shortened into hieroglyphics; writing by letters was probably invented latest of all.

It has already been suggested that the same process should be applied to children; but the difficulty is to find pictorial images which would admit of being converted into the letters of the alphabet. The difficulty is greater still,

¹ Note of Translator. I need not point out to the reader that this method of teaching arithmetic is practically the same as Froebel's, and is that adopted in the ordinary infant schools in England and elsewhere.

² Mad. Necker de Saussure mentions a child of 11 months old, who could recognize a dog in an engraving, and at a year old could be amused by looking as pictures. — L. III. c. v.

if we insist that the name of the thing pictured should contain in its first syllable the letter itself, which yet is an immense help to children in learning to read. I have, however, contrived such an alphabet for the use of the schools of the Brethren of Charity, and the Sisters of Providence, to which I must refer the reader.¹

CHAPTER VI.

THE MORAL EDUCATION CORRESPONDING TO THE THIRD PERIOD.

ARTICLE I.

OF THE OBJECTIVE PRINCIPLE AND THE SUBJECTIVE PRINCIPLE ON WHICH
THE CHILD ACTS AT THIS PERIOD.

296. The morality of children has been very differently estimated. People, in general, believe they have none. Certain sagacious observers discover that there is a morality in childhood, but are divided in their judgment of it, some asserting that it is good, and wholly good; others that it is bad, and wholly bad.

The reason why most people find no morality in children

- ¹ The Art of Teaching to Read. Such is the title of a little book the author intended to publish, but of which he scarcely completed the spelling-tables alluded to in the note I appended to No. 292. In other portions of the present work, he proposes the compilation of similar primers for elementary education, and in conversation he frequently mentioned the same wish. Amongst his papers I found a note of the following subjects:
 - 1. A vocabulary showing the proper use of words.
 - 2. A book of moral sentences suited to various ages.
 - 3. A book of poetry for various ages.
 - 4. A picture book.
 - 5. A selection of dramatic representations.
- 6. A selection of musical pieces suited to infant intelligence and set to childish words.
- 7. A selection of words, phrases, construction of sentences, divided according to the child's grade of knowledge.
 - 8. Method of reading and writing.
 - 9. Method of graduated arithmetic.
- 10. A book teaching how to develop the idea of God in the child's mind, and to bring back to it all other ideas throughout the various stages of childhood.—Fr. PAOLI.

is because they look for the morality of adults. We have said enough previously to demonstrate that the child has a morality of his own. That, nevertheless, he occasionally shows vestiges of a principle of error and moral disorder, is a fact recognized by the most of those who have investigated human nature, unbiassed by preconceived systems; and is, moreover, one of the most profound and marvellous dogmas of Christianity.

We reserve a few more words on this subject till we come to the time when the child begins to act from choice; up to that time he simply obeys the spontaneous impulse arising from the various degrees of his benevolence, which are determined solely by external reasons.¹

We shall, therefore, confine ourselves at present to observing the child's morality as it is in itself, without any regard to what it may contain of original evil.

Lovers of children, who have observed them attentively, think they have perceived that their morality is very inconstant, and shows no fixed principle. Here is the judgment of a mother, who yet would have wished to say everything that was good of creatures so dear as these little children:

"Nothing, certainly, can be more irregular and fickle than a child's moral feeling at three years of age. In fact, the predomi-

¹ I conjecture that there exists from the first, in the depths of the child's soul, a hidden mine, as it were, of benevolence and of malevolence more or less considerable. This portion of benevolence, concreated in men, to which, perhaps, Job alluded when he said that compassion was born with him (quia ab infantia mea crevit mecum miseratio: et de utero matris meæ egressa est mecum, xxxi. 18),* is that which marks and inspires their conduct when occasions arise, and makes one man genial, another narrow and cold-hearted. But even geniality and benevolence are of different kinds, and are originated more or less by corporeal sensations. There is a highest kind which comes from the light of truth. It seems to me perfectly credible that, among the original varieties of mankind, there should be one kind of a deeper and nobler nature, consisting in the greater power of intuition of mental being. Whosoever has the largest, clearest intuition of this, has a greater treasure of the noblest love in his heart, which, to my thinking, is the happiest disposition towards virtue.

^{*} This is the Vulgate version: that of the English Bible is quite different. - Translator's note.

nating elements in the child's mind rarely allow of his forming a judgment in cold blood. Always carried away by the influence of some emotion, prejudiced by himself or by those whom he loves, he is at one moment utterly selfish, and then suddenly seems to throw his whole personality into that of another, without, however, being more just when thus self-devoted." 1

297. In fact, certain acts of the child at this age would seem to prove his extreme selfishness, and others his extreme disinterestedness. Whence this apparent contradiction?

To find the answer, we must penetrate into a mystery of the infant mind, which I know not if any one has yet fathomed. The way by which I would lead the reader into it is as follows:

The child feels his self, but has no idea, no knowledge of it; he cannot have the intellectual perception of himself till he has attained a higher grade of cognition. I will give the proof of this in the next section, and, in the mean while, must beg the reader to accept it as a postulate.²

Now, during the whole time previous to the child's becoming capable of the intellectual perception of himself, he is unable, voluntarily, to refer good or evil to his known self, because this known self does not yet exist for him. This is the reason of his completely disinterested actions. His action is as yet entirely objective; the subjective does not yet exist for his intellect and his will.

298. But, then, why do so many of his other actions appear so full of selfishness?

In the first place, simultaneously with the intellectual

¹ Mad. Necker de Saussure, L. III., c. vi.

² I am aware that this will appear to many a paradox of the first magnitude. But, for the very reason that it has this appearance at first sight, the sagacious and kindly reader will doubt the reality of the appearance, giving me credit for not departing from what has the greatest semblance of truth, except for the gravest reasons and after the most careful examination.

activity, but on a lower plane, there is the animal activity at work in the child, and the latter has all the appearance of egoism, though the term ¹ cannot properly be applied to it. For, being derived from ego, it signifies the self-love of a subject knowing itself; the ego (I) being precisely the self-knowing subject.²

In the second place, although the child does not perceive himself, he vet feels and perceives mentally both pain and pleasure; but, knowing no subject to which he can refer these, he attributes them to the objects which occasion them. and associates them so closely with the perception and image of the latter, that to him they become one and the same thing. What he wills, then, are the objects; his action is always objective; but these objects are composed for him of pleasures and pains, as constituent elements, which would, in fact, be his own, if he only knew it. must, therefore, distinguish the pleasures and pains perceived in themselves, apart from the subject, and imagined to be in the object, from the pleasures and pains referred to the subject. Action, in so far as it is moral, takes its character from the conception and intention of the agent. Therefore, when the child conceives the pleasures and pains he feels to be in the objects perceived, he acts in intention on an objective principle; but the appearance of his action is wholly subjective, because he is, in fact, always seeking the objects which give him pleasure and avoiding those which give him pain. It is we who attribute this subjective character to the child's action; for it is we who refer it to the child subject, which the child himself does not. We treat the child's actions as we do our own, and we refer the latter to ourselves, because we have had and always

¹ In my History of Moral Systems I have shown that to none of the blind impulses can the term interested or disinterested be applied.—Cap. IV., art. iv. Philosophy of Morals, v. i.

² See the definition and analysis of the Ego in the Anthropology, nos. 805-811.

continue to have the perception of ourselves. Hence, by analogy, we apply to the child's conduct the motives which guide the adult, and this is the common error, the source of the endless contradictions which we seem to discover in the actions of children.

ARTICLE II.

ON RESISTANCE, CONSIDERED IN RELATION TO THE CHILD IN THE FOURTH PERIOD.

299. What has been already said with reference to the amount and kind of resistance which should be offered to the child in the previous period (227 and foll.) must be applied in the present and the following periods.

The objects which we should aim at, and which should regulate our resistance to the child, and the degree of severity we exercise towards him, are: To obtain from him a moderate exercise of patience; to rectify his conceptions; to do away with malevolent feelings; to remove limits from his benevolent ones.

As he grows older, he can bear a more rigid discipline. The principle being once laid down, that, in our treatment of him, we must apply his moral principles, and not our own, which he cannot understand, it follows that, with the growth of his principles, we gain more and more means of influence over him, and may justly exact more from him than at first.

I say that we may exact more from him than at first, because all we can expect from him is, that he should conform to his own principles, and we can demand from him only his own morality, not ours; it is only when he departs from that, that we have the right and the duty to recall him to it, and to attach pain to all those actions which are contrary to the morality he recognizes, in order that his instinctive fear of pain may help him to avoid those actions which seduce him by their apparent pleasantness.

This increase of resistance is the more necessary that the child develops, as he grows older, various feelings of ill-will and restiveness, which a wise vigilance should discern and quench the moment they appear, lest they should take root and spread.

ARTICLE III.

DIVINE WORSHIP.

300. The same form of worship should be carried on at this age as was indicated in the preceding sections (245–248). But when God has been named to the child, and he has been taught to know Him, as the most loveable of beings, the highest good, it will be time to make Him known as God-Man,¹ and Mary as his mother, and to call upon their names, as often as possible, for help in every need, for strength in every action, for thanksgiving in every joy. It is incredible how this exercise will tend to perfect the idea of God in the child's mind, to awaken religious feelings in his heart, and to strengthen him in all virtuous dispositions and habits.

Finally, we must not neglect to obtain for him those graces of which we have spoken at the period of infancy.

¹ Note of Translator. — The reader is requested here to bear in mind the Translator's protest as regards religious dogmas and practices, in the note to No. 137.

SECTION V.

THE COGNITIONS OF THE FOURTH ORDER AND THE CORRESPONDING EDUCATION.

CHAPTER I.

COGNITIONS OF THE FOURTH ORDER.

ARTICLE I.

CLASSIFICATION OF THE COGNITIONS OF THE FOURTH ORDER.

301. All the processes peculiar to the preceding stages of development are continued in this, repeating themselves, becoming more complex, producing new concepts in the understanding and new affections of the will. It is enough to draw attention to this fact, which holds good for each of the succeeding stages, the human mind throughout life carrying on, from one stage of development to the other, all that it had gained in the previous stages.

Passing onwards, then, without further comment, to the cognitions of the fourth order, let us inquire what they are.

It would take us too long to make a complete classification of them. We have shown the method which should be followed where we gave the classification of the cognitions of the third order (nos. 253–255). It will suffice for our purpose to show that all the cognitions of the fourth order may be reduced to two large classes.

Class I.—Those that have for their object the *relations* between the cognitions of the third order.

CLASS II. — Those that have for their object the relations between the cognitions of the third and those of the preceding orders.

It is evident from what has been already said, what an immensely ramified classification would result from an attempt to subdivide these two great classes. And yet this fourth order of thought is as nothing compared to those much higher orders which are reached by the adult, and especially by learned men.

ARTICLE II.

MENTAL PROCESSES IN THE FORMATION OF COGNITIONS OF THE FOURTH ORDER.

SECTION 1. - Analytic Judgments.

302. As synthesis is the method proper to the mind in possession of the third order of cognitions, so analysis is the method proper to it when it has reached those of the fourth order, in accordance with the law already laid down, that to all the uneven numbers in the orders of cognition belong synthetic judgments, and to all the even ones analytic judgments.

Let us begin by noting the difference between analytic judgments of the second order and those of the fourth.

The analytic judgments of the second order are pure abstractions; those of the fourth are elementary decompositions. The difference between these two modes of analytic judgment is immense, and it consists in this:

In abstraction the mind attends to one part only of its conception and neglects the remainder. Thus, having formed the conception of a body, I may confine my abstraction to its color, and make of the latter an abstract existence.

¹ It is evident that the first of these classes must have the same number of subdivisions as the cognitions of the third order (a subdivision which has seven branches, as shown in no. 254), and accord with the various modes in which those seven branches are connected together. The second class is likewise subdivided into the seven classes of cognitions of the third order, and the relations of each with the classes of the orders below. This indication should be enough to make the intelligent reader understand how innumerable and varied are the cognitions which the human mind succeeds in forming, so as to become incomprehensible even to itself.

In elementary decomposition, on the other hand, the mind is fixed on the whole of the object conceived, and divides it into parts. Thus, after having judged a certain object to be a colored body, I can further divide substance from accident in the object, and say, this object is composed of two parts, substance and the accident, color.

In the above example of abstraction, my mind dwelt on the color, and nothing more; but, when I judged a given object to be a colored body (a synthesis of the third grade), I must have thought at the same time of the abstract color and the subsisting object in which I placed it. So, when I now say that the object has two parts, I fix my attention equally on the substance and the accident, and, moreover, recognize their relation.

The study of this relation becomes afterwards an inexhaustible source of knowledge, which goes on increasing through the whole of life.

Until I had gained the faculty of perceiving individually subsisting entities (first order), I could not compare them, nor could I make such a comparison when I abstracted from them their qualities (second order); for my mind dwelt on the latter, abstracted and divided from the individual entities, and the entities themselves escaped me. By putting together again the entities and their abstracted qualities (third order), I once more brought the whole entity before me. But my mind having reached this stage, and having present to it both the abstract qualities and the entities themselves, I am able to confront them with each other, and to recognize by comparison their correlativity.

303. This most fertile process of comparison between things (a process which pours a flood of light into the mind), can begin only with the fourth order of cognitions.¹

¹ In abstraction (second order), there is something resembling comparisons. But, if we look closer into it, we find that it is not a comparison of the things

There is another reason why comparison cannot be made earlier, viz.: that the human mind does not recognize duality till it has reached the third order (nos. 268, 269).

In the fourth order, not only do we distinguish, through comparison, between substance and accident, between being and the mode of being in the thing itself, but we begin to analyze also the degree in which the entity participates in the predicate we attribute to it; so that, for example, we can distinguish the degree in which two bodies participate in the red color, or any other qualities which can be predicated 1 of them.

The child, then, at this period, begins not only to analyze entity, but also its modes, that which can be predicated of it.

SECTION 2. - Synthetic Judgments.

304. Just as in the preceding (third) order of cognitions the process of analysis went on, it is evident that synthesis, for which it has prepared the material, will take place in the present order.

One of the products of the analysis of the third order was the abstract conception of action. This conception of action, thus abstracted, is applied to entities and predicated of them, and thus synthetic judgments are formed.

The synthesis thus formed is the same for real objects (as, for instance, when, at the mere sight of the fire, I attribute to it the *action* of heating, as for purely ideal objects); as, for instance, if I should imagine a thing and attribute

themselves, which are left aside, but of the qualities abstracted from them; and these can be abstracted from any one thing without comparing it with another, since the attention is limited to a quality of the thing, and does not extend to the whole thing. The description given in the *New Essay* (nos. 180 and foll.) of the mental process of comparison shows the necessity of having, 1. the quality or abstract entity in the mind; 2. the perception of two subjects; 3. the comparison of both with the abstract quality.

¹ Predicate means to me that which is predicated of anything. I do not use the word in the Aristotelian sense.

to it the heating property. This shows how immensely the kind of synthesis formed at this period extends the power of the intellectual imagination (ideation), making it possible for the mind to attribute to the things it has created for itself activities which either are not included in the conception of them, or, if they are included, can yet be distinguished from them in their ideal existence.

This observation is important, as explaining the sudden development of the child's imagination at three years old.

Section 3. — Hypothetical Ratiocination.

305. At this age the mind appears first to conceive hypothetical ratiocination, or, at least, the major premiss of it. The child has already in the preceding period become acquainted with the number two (nos. 263 and foll.). It would seem, then, that he could at that age recognize the relation expressed in the major premiss of the hypothetical syllogism; i. e., that the existence of one thing is the condition of the existence of another, and all the more easily that, in feeling, the two things are already bound together and conditioned by the unitive force of the subject. Hence, the mind has only to analyze, as it were, its own feeling. in order to know both the conditioning and conditioned elements of it,1 an analysis, however, which it cannot perform with certainty before having reached the fourth order of cognitions; for the mind must: 1st, perceive the feeling; 2d, distinguish the two things joined together (3d order);

^{1 &}quot;Two events have followed each other immediately on several occasions. The first soon excites in the child the expectation of the second, and, hence, there arises for him an abundant source of pains and pleasures of which we are, for him, the authors. I have already said that the child is slowly enlightened by the lessons of experience in early infancy, because it is only very tardily that he draws from the facts he knows a general consequence which shall serve him as a rule of action in new cases. This would be an act of judgment above his capacity, and he has simply the recollection of the association of the impressions which have followed each other." — MAD. NECKER DE SAUSSURE, L. III., c. iii.

3d, observe that, given the one, the other must be there also; take away the one, the other must go; and not till it has gone through all these stages can it pronounce: If such a thing is (or happens, or is done), then the other is, etc., which is the major premiss of the hypothetical syllogism.

306. The hypothetical syllogism gives an immense development to voluntary activity; for it is only when the mind begins to form hypotheses that conditional, as distinct from absolute volitions, can arise; and the same applies to whims of all kinds. Before this period the child has no whims; he wills simply, and, therefore, strongly.

Although this conditioning of volitions lessens their force, and is so far a loss of energy, we find a compensation in their greater regularity; in their being guided by a stronger light of reason. They begin to be connected and subordinated, — an immense gain to moral development.

ARTICLE III.

OBJECTS OF THE COGNITIONS OF THE FOURTH ORDER.

SECTION 1. - Reality and Ideality.

A. - Differences.

307. In the preceding period the child has learned to know the dual number.

It is necessary to know one and two objects, before we can compare them with each other and find their differences. As this process of comparison begins at the fourth order, it is only at this period that we can obtain the mental product of the differences of things.

We have before said enough to show how much easier it is to know the *similarities* of things than their differences. But those who have followed up to this point the march of the child's intellectual development, and its products, as described by us, must have gained by their own reflection a yet stronger conviction of this important truth, so con-

trary to the common prejudice of philosophers, who assume that likeness and unlikeness are found by the same mental process.

This prejudice arises from not considering that what is like in several objects may be apprehended and noted by the mind in two ways, either as a simple quality (more generally a *predicable* one), or as a quality which we know to exist in several objects, making them alike.¹

Now, to know likeness in this second way, it is assuredly necessary to go through the same process by which we recognize difference; but the case is quite different if we gain our knowledge in the first way. This is of the simplest kind, and belongs to the second order of cognitions; for it consists in fixing our intellectual attention on a single quality of one or more things, taking no heed of their other parts or of their number. In this operation, we only repeat the same act of attention to the identical quality in each one of the objects passing before the eyes, without in the least attending to their number or comparing them together.

Differences, on the contrary, can be discerned only by comparing various things and noting what it is in which they all differ.

B. - Numbers.

308. The number three belongs to this order, the child having in the previous one learned to know distinctly the number two.

He arrived at this by adding one to one, an operation which he can always repeat, and which leads him to numeration, without, however, attaining a distinct knowledge of the higher numbers, which remain vague in his mind. In the same manner, he can now arrive at the knowledge of

¹ Strictly speaking, the latter is the only way by which we arrive at knowing *likeness*; but it is commonly believed that we know it so soon as we know the *etement* which is like. It is not observed that we cannot know this till we know that it is like, i. e., that it exists alike in two or more objects.

three, by adding one to two, or two to one, and the latter operation, once learned, becomes a general formula by which he can rise through the scale of numbers, always repeating the addition of two, and thus learning to know them by a new relation.

C. - Collections.

309. With the science of numbers arises the knowledge of collections of like objects.

The child will henceforth have a distinct idea of collections composed of two, and those composed of three, objects; but as yet he will have only a confused idea of those composed of larger numbers. He will, indeed, be able to discern the many and the few; for, having a confused idea of more numerous collections, and a clear idea of two or three things, he will easily recognize that there are collections more numerous than those he has a clear knowledge of.

D. - Means.

310. Before this the child could not have the conception of means; but it is possible for him now, because he henceforth knows two things, the one of which conditions the other (no. 305). This again immensely increases his mental activity; for now he can not only instinctively, as before, but by an intellectual calculation, subordinate a means to an end. He cannot, however, as yet subordinate a series of means, each to the other; this requires reflection belonging to a higher order.

E. - Intellectual Perception of One's Self (of the I proper).

311. So far as I know, the age at which man perceives himself has never been accurately examined by philosophers. They have generally accepted it as a settled thing, requiring no proof, that man perceives himself from the first moment of his existence, and that he could perceive nothing without having first perceived himself.

But these gratuitous suppositions are not supported by

exact observation of this important fact. On the contrary, it is certain that man perceives and understands many other things before he perceives and understands himself, and that he does not know the true value of the monosyllable *I* before having reached the fourth or fifth order of cognitions.

Moreover, observation gives us another result, which is, that the knowledge man acquires of the I varies both in degree and form at different ages, and, therefore, that this word I (like so many others), pronounced by him at one time of his life, has a meaning different from that which it bears at another.¹

We must now say something on this head, and for this purpose we will briefly take up again the analysis of the *I*, given already elsewhere.²

The I expresses the human being who is speaking, and who names himself as existing, as acting.⁸

- ¹ This observation appears to me of the utmost importance for logic; for it explains the reason why men who are quite honest can talk at length on some subjects without arriving at a common understanding. To discover and determine the value each man gives to words, at the different periods of life, would be a great and most important aid to the art of education. The reader will have perceived that we are endeavoring to lay down the elements of such an aid, and will, perhaps, in view of our object, condone our dwelling on certain subtle portions of it which cannot have much interest for those who do not enter into our more remote views. Words change their meanings in men's mouths, not only according to their various stages of intellectual life, but also through other circumstances. To find these out, and to track prejudice and error to their most secret recesses, is to prepare the way for agreement between honest-minded men. So moral is the office of logic! How much of new dignity would this science receive, if those who taught it to the young revealed, step by step, its natural co-ordination with virtue and the peace of the human race!
 - ³ Anthropology, nos. 805-811.
- ³ When the Chaldean translator of Genesis gave the famous passage in that book (ch. ii. v. 7) thus: "And he (Adam) was made a speaking * soul," he showed that he conceived man, not in his earliest, natural state, but in that which follows the earliest, when, having perceptions of external things, his organs of speech are stirred without any deliberation on his part, or seeking of words. Apart from his external perceptions and his inward sense of divine grace, the first man must have heard God himself speak, and have learnt immediately from him a part, at least, of language. All this, however, does not necessarily presuppose the perception of the I, but may take place at an earlier period.

^{*} Note of Translator. - In the English Authorized Version it is "man became a living soul."

Now, the human being is composed primarily of two principles: (1) the animal principle; (2) the spiritual principle. These two are, however, so related that the first is bound to the second, and the second exercises its strength and dominion over the first, in such sort that both can be reduced to one sole and supreme principle,—the principle of intelligence, which has power also over the animal principle conjoined to it. This supreme principle, together with the inferior elements bound up with it, is man, but is not yet the I.

The two principles indicated are both feelings, and, therefore, man is never without feeling. He himself is an intelligent-volitional feeling, which governs another sensitive-instinctive feeling. But this sentient man is not the I, because the I is not a feeling; it is a consciousness.

312. How and when does man, then, form that consciousness of himself which he afterwards expresses by the monosyllable I? I will first state a plausible reason for the belief that he forms it very early, or rather that he cannot be There can be no doubt that, as I have shown in my Ideology, from the first, ideal being is manifested in man. To say that ideal being is manifested in him, is to say that ideal being manifests itself in a substantive feeling, and that this feeling is himself. This substantive feeling and the being effulgent in it are, therefore, united. It might seem to follow that this union would suffice to make the subject perceive himself, if it be true, as I have affirmed elsewhere, that "feeling is as the scene on which objects appear and become visible to us." 1 do not cancel the latter statement. It is certain that nothing can be intellectually perceived by us, but that which affects our substantive feeling. Hence, I grant that the feeling itself, being that through

¹ See Opuscoli Filosofici, Vol. I. pp. 99 and following, of the Milan edition, 1827. Teodicea. Lib. L

which the understanding sees whatever things it does see, itself may be seen, without needing to be presented to us by any other feeling.

But, first, in the substantive feeling we must distinguish the act by which it sees being from its other acts. act by which it sees being can never be that by which it sees itself; it is rather an act which excludes the vision of itself. In so far, then, as feeling directly goes out towards being, it is unknown to itself. But, be it carefully noted here, man, and, above all, the Ego, is essentially the principle which sees being; it is the substantive-intelligent feeling. Deprived of that feeling, man ceases to exist. He has no consciousness of himself until he has the consciousness of being intelligent. In order, then, to attain such a consciousness, the substantive feeling must not only see being, but must see itself as seeing it.1 It is not enough for this that it should be present at the scene whereon things become visible; it must, besides, by a new act of its own, attribute the being it sees to itself as seeing being, and through this attribution illumine and see itself in being. This new act required of it must be its own, not given by nature, but a spontaneous impulse due to some want or stimulus. This is the important operation it has still to perform, in order that it may perceive itself.

While, then, all that falls within his feeling is capable of being seen by man, and feeling itself, seeing being (itself), enjoys this advantage, it must be added, that the condition of this vision or perception is a new act proceeding from within the subject, an act of the faculty of attention, concentrating and fixing itself upon the object it wants to see; and by this act, the mind (the substantive feeling)

¹ Let it not be supposed that this alone is sufficient to enable man to express what he sees: he still requires much more observation of what he sees internally, and the words to express accurately what he sees. All the efforts of philosophy, and of the centuries, must be applied to the elucidation of this great fact.

beholds itself as seeing being, together with the being seen and contained in the latter, as in its own genus.

Will, then, this act of self-knowledge, involved as it is, be easier than the acts by which the mind knows other things?

313. The sentient man works through knowledge, and he knows first the things which are needful to him. not in the least necessary for him that he should know himself; what he needs are other things which he has not but wants to have, and exerts himself to obtain, and must know in order to work for them. He does not seek himself, because he possesses himself; but he seeks the things which complete this self, which supply what it lacks, meets all its deficiencies and limitations. Man is an incomplete being; for if he sufficed to himself, he would seek nothing beyond; he would have no motive activity, but solely a statical one. His very sensations of pain and pleasure are not conceived by him except as connected with external objects, and it is in these that he supposes them to exist (no. 103).

Man, then, can be roused only by language to turn his attention on himself.

But language itself is not learned by the child all at once; he must pass through several orders of cognitions before he can understand all the parts of speech.

We have already seen that, at the second order of cognitions, he learns only substantive, or rather substantiated, nouns; nor is it until the third order that he arrives at forming an abstract idea of the action of things. Hence it is only then that he can name his own actions, and he can still only name them objectively, the same as the actions of all other things. He has, indeed, the feeling of his own actions, which is simply an extension of his substantive feeling, but nothing more. His actions are external, and fall under his senses like the actions of others; he himself, on the other

hand is internal, — is an invisible principle producing them. Hence he knows his own actions before he knows that they are his own, — before his understanding refers them to himself; for he himself does not yet exist for his understanding. He arrives, indeed, in the third stage of cognition, at attributing the actions to a being, but not at observing, among beings, which of them is himself.

In the fourth order of cognition, certainly not earlier, and perhaps later, he is able to perceive himself as the acting principle, by means of language; that is, he can recall his own attention from without to his own motive feeling, and thus perceive that certain actions have for their cause that feeling which constitutes himself, and in this differ from others that are not so produced. The first and elementary cognition of himself by man consists, then, in this perception of "himself in action," the word HIMSELF meaning here the substantive feeling which constitutes man as perceived by that same man.

314. This motor feeling can be very well expressed by the word I; but this word has not yet the full meaning which belongs to it, and which men in a later stage of development will attribute to it.

The I is never uttered alone, but always with some verb expressed or implied,² a manifest proof of the legitimacy of the method by which we have explained its origin. The first I is then "the substantive feeling in action, perceiving

¹ When St. John Chrysostom explained the words in Genesis ii. 7: Factus est homo in animam viventem by factus est homo in animam operantem (in Gen. Homily xiii.) he expressed the conception of man in the state he is in previous to the use of speech.

¹ In the ancient languages the personal pronouns were enough without the addition of the verb to be; a proof that the verb was contained in the conception of the pronoun, and did not require to be expressed; for example, in Scripture God says "I the same" (אָזְה 'Deut. xxxii. 39; Isai. xliii. 10) for "I am the same," and elsewhere we read, "Thou thyself, O Jehovah, our God!" אָרָה הוא (Jerem. xiv. 22), i. e., "Thou art our God." Innumerable examples of the same kind might be added, in which the substantive verb is considered as included in the pronoun itself.

and expressing itself." But, reflecting further on himself, man comes to know the identity of himself speaking and himself spoken of, and then the I receives a fuller meaning, and comes to signify the acting human being (the acting substantive feeling) perceiving himself as acting and expressing himself as such, knowing that he who speaks is the same as he who is spoken of. This meaning of the monosyllable I can be attributed to it only by the man who has reached, at least, the fifth order of cognitions.

The inclusion of so many and such abstruse elements in this monosyllable explains why it is understood so late and with so much difficulty.

I made the experiment on a man of over forty, half an idiot, named Stefano Birti. He could speak and understand: but was not intelligent enough to compass the use of personal pronouns. When he spoke of himself, it was always in the third person, by his name, Stefano; he would say, for example: "Stefano is a good man," or "Stefano is poor"; or "Stefano eats such a thing, or does so and so." Only when he pronounced Stefano he pointed to himself, and when he named others he pointed in the same way to them. I tried again and again to make him understand the use of the personal pronouns I, thou, he. He would repeat them after me, but only mechanically, without being able to apply them, or showing the least inkling of their meaning. Supposing, I said to him, "I did such a thing," he would repeat "I did such a thing"; if I said, "Stefano, were you in such a place?" instead of answering me he would repeat, "Stefano, were you in such a place?" But, if I put the question in the third person, he would answer me and reply to the question.1

¹ Note of Translator. — These facts are confirmed by the most ordinary observations on little children. The use of personal pronouns marks an epoch in their intellectual development. It was noted, as the surest sign of very unusual precocity, in a little grand-niece of my own, that she used the pronouns I and you at sixteen months, the ordinary age being two years and a half or three, and often later.

315. I have before stated that we find in the peoples of antiquity a gradation of intelligence similar to that which we observe in children, and that ancient languages retain the traces of it. We find similar traces of the infancy of nations with regard to our present subject, in the fact that, the older a language is, the less do the persons introduced as speaking make use of the personal pronouns I and thou. It is for this reason that the use of the third person, rather than the first, is so common as the mode of address in Oriental languages.¹

If we now turn our attention to children, we shall easily perceive the difficulty they find in using correctly the personal pronouns I and thou. I am glad to quote, in preference to my own, the observations of others, where they are confirmed by my own, such testimony precluding the accusation that I bend the facts to support my theory. The following words, which completely bear me out, were written by a

¹ The Biblical scholars of Germany have observed that, when our Lord in the Gospels speaks of himself in the third person as "the Son of Man," he uses a form of speech proper to Oriental languages. (Paulus, Exeq. Handb. 1, 6, p. 465; Fritzche, in Matt. p. 320); but these biblicists, full of apparent knowledge and most real ignorance, can never rise to the comprehension of the force of that expression as used by the Man-God in speaking of himself. Let me here make another observation on the genius of Oriental languages. Even when they use the pronouns Iand thou, they easily mix them up with the third person, as if they had not yet attained sufficient skill in the art of applying them. This is apparent each time that the relative pronoun, expressed or understood, follows the personal pronouns, We will take our examples as before from the Hebrew. In Ezekiel (xxi. 25), the prince of Israel is thus addressed: "And thou, O deadly wounded, wicked one, the prince of Israel, whose day is come." This passage, if translated literally, would not be rendered, by "whose day is come," but "to whom comes his day," in the third person. In Isaiah likewise, the passage (liv. 1) translated in the Vulgate: lauda sterilis, qua non paris: decanta laudem et hymnum, quæ non pariebas, would be rendered literally from the Hebrew: "Sing, O barren, she who did not bear; break forth into singing, neigh, she that did not travail with child," לא ופר where the second person is changed to the third. In the following passage, also from Isaiah (xxviii. 16), the first person is in the same manner changed into the third: "Behold me, he who laid the foundation," הכבי ופר. There are many other cases in Hebrew where the sentence begun in the first or second person ends in the third, as may be seen in the Hebraists. The ancients had a difficulty in holding firmly to the first and second persons.

woman who assuredly had no thought of supporting me in her observations and writings, and whose remarks I am always glad to quote, for their general truth and sagacity:

"That which most puzzles the poor child's brain is the use of pronouns. Me and I especially remain for a long while as in a fog to him. These words being applicable solely to him who utters them, they are not applied to the child in speaking to him of himself. He sees their object changed at every moment, without ever himself becoming that object. Hence he never thinks of using them. Even when he wants to designate his own person, he considers himself, as it were, from without, and speaks of himself by his name, as he would speak of any one else. Give to Albert, take Albert, that is his way of expressing himself. I have heard a child, to whom those about him said thou, always use the pronoun thou in speaking of himself. It would be curious to observe the introduction of I."

F. — Time.

316. It is only at this period that the child's mind can begin to form the conception of time. This conception is not formed, at first, by comparing the three parts of time, the present, the past, and the future, but by comparing two of them only, the present with the past, or the present with the future. This is as much as can be compassed by the child who has reached only the fourth order of its cognitions.

At the third order, he has attained a clear idea of the

¹ The I, in fact, presupposes, as we have seen, 1st, that he who uses it has the abstract conception of the act of speaking; 2d, that he refers this act of speaking to a speaking subject; 3d, that he understands that the I indicates precisely that speaking subject. Who does not see how difficult it must be for the little child to do all this, and even more than this, as we have shown in the analysis of the I?

² This observation contains an entire demonstration of our ideological theory, which shows that the understanding has for its form the essential object, which is universal being.

³ Mme. Necker de Saussure, L. II., c. vi.

number two; at the fourth, he can compare two distinct things and perceive their differences. The operation of distinguishing time present from time past, or time present from time future, belongs to this fourth stage; but to distinguish all three periods, by comparing them together, is absolutely impossible before the fifth stage.

317. Let it be noted, moreover, that we are not now speaking of time as entirely abstracted from events, but of time considered as a quality, as predicable of events. That one event ceases to exist when another begins, or that one event succeeds another, remains stamped as a fact on the retentive faculty of the child, by the mere imitative force of his animal nature. Later on, events are linked together by the associations of ideas; but this is not yet the conception of time in events. The child must note the event which took place yesterday, and distinguish it from that which takes place to-day, by comparing the one with the other; or he must distinguish the event of to-day from that which will happen to-morrow, before we can say that he has formed the conception of time present and time past, or of the present and the future.

Now, in the first place, time is a predicate of events which does not fall under the senses; it is a limitation of the super-sensible existence of things. The mind, therefore, requires language to fix and retain it. Moreover, the child's power of attention is but little developed as yet, and the small force it can exert is wholly absorbed in the objects that are present, so that scarcely any remains for what is past and for what is to come. Hence, observation shows that children are late in distinguishing one time from another.

"It is a peculiarity of the infant imagination that it is occupied solely with the present, differing thus widely from ours, ever stretching forwards or backwards, recalling the

past to life or anticipating the future. The little child is a stranger to the events of the day before. An accident which has happened by its fault is a fact like any other, which it has nothing more to do with. It is new-born each morning with the feeling of innocence, and feels itself justified of all wrong-doing by simply saying, 'It was yesterday.'".

We find another proof of the difficulty which the child experiences in marking time properly, in the steps by which he acquires the use of language, the true mirror of his conception. For a long time, he uses the verb in the *infinitive*, and not until much later does he express the various tenses. We find the same thing in the languages of some peoples backward in intellectual culture. In the most ancient languages, also, the verb has but few tenses, which are not well determined, and the use of which is uncertain.²

G. - First Definite Principles, drawn from the Ideas of Actions.

318. Ideas, already numerous in the child's mind, very soon become principles, by which, as we have seen, he henceforth judges and acts (nos. 270 and foll.). For an idea, however, to acquire the form and value of a principle, it must remain a certain time in the human mind; its application belongs, in fact, to the next higher order of cognitions, to that of the idea itself. Hence, the ideas of the third order become principles in the fourth.

Amongst those ideas we found those which belong to actions (nos. 260 and foll.). The most important principles, then, which the child acquires in the fourth stage of cognitions are those which he works out from the ideas of actions.

¹ Mad. Necker de Saussure, L. III., c. v.

² In Hebrew, there are only the *past* and the *future*, the simple present being understood in the participles or the infinitives, the nouns or pronouns, or else expressed by one or the other of the two tenses.

When he has learned to know the actions of things, and has seen the same actions repeated many times, he begins to conceive the constant method which governs them, and is able to foresee in what manner a given object before him will act, what force it will exert, what effects will follow from this cause. In this manner, he gradually sets limits to the power of the various objects known to him, and he ceases to expect more from them than certain definite operations. Should they produce any unusual effects, he wonders at them, as strange to his belief and expectation.

319. Until the child has learned to connect certain things with certain actions, his credulity is unbounded: nothing seems impossible to him. When he hears his mother speak as if she knew what he had done out of her sight, or his nurse says to him that her little finger has told her of some piece of naughtiness he has committed, why is he not surprised? Simply because he has not yet firmly grasped the limitation of bodies precluding their existence in more than one place, or the limitation of the senses precluding hearing beyond a certain distance, or the limitation in the action of the little finger precluding the power of knowing or communicating things. I remember several incidents of my own childhood which prove how slowly children set a limit to the actions of things. My uncle Ambrose, who took such care of my childhood, was very tall, and I, in my childish belief, deemed his strength irresistible. One day, when I was playing about his knees with the freedom he always allowed me, he said, becoming grave: "Be quiet, or I will give you a fillip that will send you out of that window" (one which was standing open in front of him). The threat did not frighten me, for I knew he loved me too well to do me harm; but I was amazed at the strength of his fingers, and went about gravely telling every one that my uncle was so strong that, with a single

fillip he could send people out of the window, and I believed it without the slightest hesitation.

It is experience, then, that limits in the child's mind the action of things, and, previous to this experience, he places no such limitations, but believes everything possible; his credulity is boundless. His faith in the assertions of others depends very much, as we have seen, on his affection for them; but no affection would move his understanding to assent to that which he believed to be absurd. He does not believe it absurd that objects should have certain virtues and faculties which we adults know them not to have, until he has learned from the facts themselves the non-existence of such attributes. These facts deserve to be well meditated on, for they are pregnant with important consequences, supporting the doctrines of ideology and anthro-And, indeed, two things remain to be explained in the credulity of the child prior to experience: 1st, why he believes everything to be possible; 2d, why or how experience brings limitation to this possibility.

No ideological theory can give an adequate answer to the first of these queries, except that which makes ideal indeterminate being innate in man; which being contains and exhibits in itself universal possibility. So long, then, as the child has no other rule of judgment, except this of mere, bare possibility innate in him, he will judge everything to be possible; he will believe everything, excepting only what seems to him intrinsically or metaphysically impossible; for to that even the child will never give his assent. Without this innate idea he could not, and would not, judge anything to be possible. Here, then, is one more fact, in addition to the innumerable others which I have adduced elsewhere, in confirmation of the philosophical theory I have propounded, and it would be for the honor of Italy, that the assertions printed and reprinted among us, to the effect that this theory is unsupported by proofs derived from experience, and rests only on reasoning by exclusion, in which it is doubtful whether every part is fairly enumerated, should come to an end.

320. In order to answer the second query, we must recall what I have said elsewhere on the origin and the strength of the principle of analogy.2 When man finds a given effect constantly occurring through a long space of time, he becomes convinced that it will always occur in the same way, and, in consequence, if the event is periodical, as, for instance, the rising of the sun, he predicts that, when the period returns, the event will take place. reason of this is, that the mind conceives the cause of the event; it conceives that the event cannot stand alone: that it must ultimately be the effect of one or more substances; and it has an intimate notion of the stability of substances. Seeing the constant order of nature, it does not hesitate to judge it invariable, unconsciously performing this whole process of reasoning: i. e., "that which occurs in this universe is the effect of something constant; therefore, it will continue to occur in future."

It is by a process somewhat similar to this, beginning in his infancy and going on throughout his long development, that man makes up his principles, opinions, and belief, regarding the working of things. Seeing effects occur always in the same way, certain occurrences always proceeding from certain objects, certain others always absent, he connects the actions with the objects, the

¹ That the enumeration of all the parts is complete should, I think, be evident to the reader of the *New Essay*, nos. 467 and foll. No one has ever been able to impugn my argument (an argument which does not stand alone, but is conjoined with so many others); and yet there have been many who, with a recklessness and presumption which would be incredible anywhere else, but, to our shame, are only too credible among us Italians, have thrown vague doubts upon it, wholly unsupported by proofs.

² See Treatise Della Coscienza Morale, nos. 198 and foll., Logica, no. 696.

entities, and arrives at certain persuasions, which, if formulated, would run thus: This entity has the power to produce these effects and not others; the potency of this entity extends only so far, has such and such limits, such and such a nature, form, laws, etc. Whenever man has succeeded in establishing for himself one or the other of these principles, he has restricted in so far the sphere of his credulity; for, if any one should tell him of an occurrence in contradiction with the principles he has formed regarding the action of beings, he would set it down as impossible and refuse to believe it. Thus, if I should say that a spider had walked through the air without holding on to a thread, I shall not be believed by any one who had laid down in his mind the principle, that any animal without wings cannot move freely through the air.¹

321. Who does not see that we have here the guiding thread to a history of human credulity and incredulity which would be of the utmost value?

This history has the same epochs in the individual as in the whole human race. The infant begins by believing everything which is not manifestly contradictory (for even the infant never unites yes and no, but feels their antagonism); then it forms opinions which limit the powers of

¹ Let me be permitted to show, from the words of a noble Italian philosopher, how the principle of analogy extends through human life, and how great is the importance of giving it a direct application. "Nevertheless," says Pallavicini, "this principle is true, and God teaches it to us through the mouth of the wise man: that which has been shall be. For by this maxim human life is governed; on it is founded the structure of governments, and the general conduct of the people, whether rich or poor, whether young or old; and in whatever circumstances. On this maxim philosophers base their accounts of the common usages of men; those who reign look to it in the constitution of their laws; jurists depend upon it in prescribing to magistrates the rule for judging from circumstances the truth of facts which have not come under their experience; by this are guided doctors, navigators, the leaders and professors of all the arts of conjecture, in constructing the rules of their professions; the sole counsellor of all these is the past, the 'sagacious foreteller of the future,' as I hear you named it yesterday." — PALLAYICINI. Del Bene. Rome. 1644. p. 232.

the things it perceives. These opinions remain incomplete for certain recondite reasons which we have not time to point out here; they are a web still on the loom, so to speak; none of them are yet very conclusive or firmly established in the mind. By degrees, however, they become conclusive and stable; but this stability and conclusiveness are not attained until we know, not only that "a given entity has a certain determined potency and mode of action," but have concluded that "it has no other mode of action, no other degree of potency, than those it has constantly manifested to us." It is this negative portion of our opinions on the action of things that gives them firmness and conclusiveness. For, until I have added to my belief that a given entity is endowed with certain powers exercised in a certain manner, the judgment that it has no other powers and no other mode of action, my mind remains open to accept any new discovery concerning this entity, and to enlarge the powers I have previously attributed to it, and thus to modify and amplify my opinions about it. But, when my opinion is already made up, and I have arrived at an absolute, not a provisional persuasion that "a given being, i. e., a given species of being has no other mode or degree of action," then I shall no longer give credence to any one · who tells me of any occurrence involving a different mode of action and a greater degree of power in that being. If, however, I myself should, with my own senses, verify the fact, without the possibility of denying it or explaining it otherwise, I should be obliged to alter my opinion, and to form a wholly new one concerning the efficiency of that object.

322. Here we come to the three things which are both

¹ On the difference between provisional and absolute assent, see the New Essay, nos. 1303 and foll., Logic, nos. 141 and foll.

interesting and have an important bearing on our investigation: - (1) What is it that determines the period at which man comes to a conclusive opinion on the efficiency of things? (2) To what degree are those opinions firmly impressed and unchangeable? (3) When and how does this process take place rationally and when irrationally? With respect to the first query, it is certain that neither individuals nor races advance with equal steps, and, therefore, that the operations proper to human nature, such as those of which we are speaking, although they take place alike in all human individuals, do not take place in all at the same period; and this holds good in the development of races also. It would be impossible to determine all the circumstances and causes which lead an individual (and the same may be said of a nation) to take such a step exactly in such a year, on such a day, at such a moment, the minute circumstances which influence the human mind being It would, however, be a valuable inquiry, though beyond the scope of this work, to ascertain the fixed laws which undoubtedly govern these occurrences.

323. With respect to the second query, as to the degree of strength with which the opinion concerning the limits of efficiency in things is held as final and conclusive, it varies with the age and with the individual. It may be said, generally, that the older a man grows, the more wedded he becomes to his opinion, and the more difficult it is for him to break it up and form a new one. It is hard for old people to accept new opinions, not only in philosophy, but in physical matters, especially if they live in a small circle of society, and lead a uniform life, with little variety in their surroundings. This fact, like so many others, results from the general law,—that the longer and the more frequently a man observes the same actions of the same beings, and no others, so much the

stronger is his conviction that the powers of those beings are limited to those actions, and cannot go beyond them or operate in any other manner. This explains what experience demonstrates, that man begins his life with universal credulity, which gradually becomes less and less with his increasing years, and gives place to a principle of incredulity, the latter in mature age often becoming the predominate one.¹

- 324. In answer to the third query respecting the rational, or irrational credulity or incredulity of man, it may be said in general:
- (1) That the credulity of the child is always rational because he has no reason for unbelief, and in him it is neither more nor less than the affirmation of absolute possibility, the only possibility yet known to him. Now, even what is physically impossible is not impossible metaphysically, and the child, in thus affirming absolute possibility, affirms the truth. Thus, if any one assures him that he, the speaker, can fly, he feels no distrust, because he sees the thing as possible, and, being unable as yet to measure the powers of the person who addresses him, he has no alternative but to believe him on his word.
- (2) That the incredulity spontaneously awakened in the mind not distorted by passion, is also rational, because it does not affirm absolute impossibility, but only physical impossibility, and even this only provisionally. Thus, if a

¹ The word credulity involves the conception of faith in the assertions of others. This is another reason for the distrust of the old, who have had large experience of the falsehood of men and of the advantage they take of the mental weakness of age. But our argument does not refer so much to the credence given to the word of others, as to the facility of forming new opinions about the efficiency of things, whether on the testimony of others or on our own observations and experience,—observations and experience which are neglected in proportion as we expect less from them. And he who has fully made up his mind ceases to expect from them any fresh knowledge.

man disbelieves in an ox flying through the air like an eagle, he does not deny the absolute possibility of the thing, but affirms that the powers of the ox, as known to him by multiplied experience, are not such and so great as to overcome its weight.

- (3) Irrational and erroneous incredulity begins whenever the man himself affirms that that which is physically impossible is also absolutely impossible, the passage from the one to the other being a culpable and self-interested exaggeration. It is the men of science, not the people, who fall into this error, nature thereby giving them a useful warning, if only they would attend it, not to boast too much of their superiority to other men, who retain as their heritage, not systematic science, but common sense.
- (4) There is another error that man falls into, when his judgment regarding physical impossibility is definitive, instead of being provisional. This again is an exaggeration,—the arbitrary decision of the passionate or conceited man; for, in fact, our external experience is often incomplete, and forces and powers remain occult in things, until revealed to us accidentally, to the confounding of our judgments, which have erred in setting certain absolute limits to nature.

We have seen that benevolence inclines the child's heart to credulity. In like manner, malevolence inclines the adult to incredulity. But, as the former would not be possible, unless there were a ground of possibility in the intellect of the child, so neither could the man's malevolence and hardness of heart make him so tardy to believe and assent to the truth, were it not that this tardiness rests on a real or supposed ground in the intellect, and this ground is physical impossibility, deduced from experience, which the man arbitrarily transforms, sometimes into absolute impossibility, sometimes into physical impossibility, not only probable and provisional,

but certain and definitive, refusing every further experiment and shutting out any light by which the mind might receive better instruction and illumination.

Now, it is certain that the limitations we impose on the actions of things cannot be regarded as final, so long as we rest them on imperfect observation and experience, unsupported by other principles of reasoning. We have already said that the law of analogy produces only probability, not certainty. It follows that the conclusions derived from this law are always open to reconsideration upon new discoveries and new arguments: and, if we hold these conclusions as final, we shall deceive ourselves grievously.

325. Meanwhile, if we observe what takes place in the mass of mankind, we shall find that they early form for themselves conclusions and principles; but, with the increase of their knowledge and experience, they abandon these and form new ones, larger and more accurate, which approximate more and more to the truth and also to reason. This alternate process of forming exclusive and fixed opinions on the action of things, and of renouncing them to form others, is repeated more than once in the life of those who are continually advancing in the study and knowledge of nature; while, on the contrary, those whose culture remains stationary hold more and more stubbornly the opinions and principles they formed at first.

The more fixed and narrow these early opinions become, the greater is the incredulity of him who holds them. There is a kind of incredulity which is the result of ignorance, that is, of opinions too fixed and exclusive concerning the action of things. If I should try to convince a peasant that the sun stands still and that the earth moves, that the earth has the form of a round ball and is inhabited over its whole surface, with other natural truths of the same kind, he would at

¹ On the value of this law, see Trattato della Coscienza Morale, nos. 488 and foll.

first think I was making game of him; and, if I showed myself seriously convinced of these facts, he would simply shake his head and refuse to listen. The difficulty of believing certain perfectly true things which are believed by the learned is to him insurmountable, and thus the incredulity of the ignorant is, under one aspect, greater than that of the scientific man.

Man begins, then, with universal credulity concerning the actions of things, which he rapidly exchanges for a species of incredulity, as soon as he has firmly fixed and concluded his first opinions about natural occurrences. But, with the progress of knowledge, these first opinions are rectified and enlarged, and the human mind enters a new course, impelling it gently back again from the incredulity of ignorance towards the primitive credulity of childhood, restored to it by a wider knowledge of the powers of nature. This credulity, increased by science, may itself go beyond its due limits; and there have been men, reputed men of science, who have believed everything possible to nature, who have exaggerated her powers, and, unsupported by any observation or experience, and even in opposition to all observation and all experience, would yet say: Who can know all the secrets of nature? Who can prove that no occult forces reside in her depths capable of producing phenomena of the most extraordinary kind ever witnessed? Such men, with all their knowledge, have gone back wholly to the universal credulity of childhood. I have but to mention one word here, animal magnetism, to convince the reader that everything has been believed by certain men to be possible to the secret forces latent in matter, or in some way or another. in the universe.

But, while many have firmly believed that science itself, the fruit of such arduous study, taught them that everything was possible and nothing impossible to nature, others

have, with like dogmatic presumption, set their faces like a flint against any possibilities transcending the conclusions they themselves have arrived at regarding the powers of nature. Religious incredulity has found a fancied support. first in the one, and then in the other, of these errors. have been unbelievers who denied miracles because, they said, we cannot tell how far natural forces extend, and therefore the facts we term miraculous may be natural. And there have been others who have rejected miracles for the contrary reason, i. e., that the so-called miraculous events exceed the powers of nature, which are too well known to admit of any possibilities beyond. There is something actually comical in the inexpressibly presumptuous ignorance, tricked out with grammatical pedantry and philological erudition, of the so-called rationalistic Biblicists of Germany, who frankly exclude from the Bible whatever they hold to be impossible, as measured by the rules of possibility they have arbitrarily established.1

SECTION 2. — Morality, Moral Principles, Conscience.

326. So long as the child acts from natural impulses only, his action is spontaneous, and no moral struggle can arise in his mind. He will experience physical pain, he will fight,

¹ One of these rationalists, in a work pronounced to be implous by public opinion, has set his predecessors in Biblical rationalism by the ears, in order to raise on the ruins of their teaching a system of his own more absurd than all the rest. He, however, so far agrees with them as to exclude every supernatural occurrence, on the following grounds: "We are nowable to explain through natural causes those changes in the world and in man which were imagined at one time to be the work of God himself, through the ministry of the angels." (D. F. Strauss, Vie de Jésus, etc., V. I. p. 1, Première leçon, cap. i. § xvi.) Let us now consult Newton, consult all the greatest physicists, and we shall find them all, without exception, asserting that the progress of physical science has not, and cannot, help us to discover a single natural cause. We are ever, through the advance of science, learning more and more of the facts of nature, —facts whose uniformity gives them the name of laws, facts linked together in time and circumstances, but always facts. Physical science, by its immense strides, has succeeded in destroying utterly all the supposed natural causes, none of these causes having been verified or strictly

so to speak, against the nature of things, he will choose between the things which are pleasant or painful, or between those which are more or less pleasant; but no moral motive enters here: he feels himself indebted to nature only for its goodness and beauty, and this goodness and beauty are, in fact, the measure of his love and admiration, as his love and admiration are the measure and the rule of his conduct.

But, as soon as he learns through language to know the will of an intelligent being, his mother or nurse, he begins to bow before it, and to conform himself to it, with the sense of being bound to do so; as recognizing that this intelligent being is worthy of his affection, and deserves it the more for being the first to give him love and service.¹

This state of mind belongs to the third order of cognitions. Later on, it happens at times that the child finds the known will of the loved person (the will that has become to him a positive law) in conflict with some of his inclinations, and with the satisfaction of his wants. This is the beginning of moral struggle within him, and creates a new state of mind. Let us mark well the moral nature of this struggle. While his judgment of things around him was guided solely by their pleasantness and beauty, or their unpleasantness and deformity, he had only to arrange them in the order of

proved: they are all and always simply assumed. Hence the ignorance of physics, in times past, could lead to imagining causes in nature, and from these, as from so many demonstrated truths, to explaining the events in the world. But the rigorous logic of modern science, having shown that all these supposed causes are mere hypotheses, has made a clean sweep of them, and cleared the ground, leaving open the door for supernatural causes. It follows that Strauss exhibits the grossest ignorance of the state of modern physics and its true results, and stands little better, as regards logic, when he tells us that "we know now how to explain By natural causes the events which occur in the world and in humanity." And yet his Biblical doctrine,—let us say, with his countrymen, his impiety,—rests entirely on this fine foundation.

¹ It has been observed that the affectation of affection has no influence with children, who have a fine perception of the true or false in sentiment. "Rien n'égale," says Mme. Necker, "la froideur des enfants pour les démonstrations hypocrites." L. II., c. ii.

his affections, giving the highest place to the first, the lowest to the second, and an intermediate one to others. He exercised his moral feeling by distributing his benevolence and admiration according to the merits of things. He might, indeed, as we said before, be led into an unfair distribution through the traps laid for his judgment by the deceitfulness of the people about him; but the false opinions so formed, which governed his estimates, could not excite his remorse, because they were formed on appearances which he held to be true, and on the word of persons whom he thought himself bound to trust.

But, when he comes to know the will of another person, a new element finds entrance into his mind which must necessarily disturb it. The will of a person is something opposed to the nature of things: in nature there is necessity: in will all is free and contingent: nature is constant, immutable; will continually changes: the various parts of nature, the various beings which compose it, follow a fixed order which seems to leave no place for free will. It is a new thing, which has no homogeneity, no resemblance with these things. The exigencies of things are always the same, but the will of another person requires sometimes more, sometimes less; sometimes demands one thing, sometimes the contrary; is sometimes directed to what is easy and pleasant, sometimes to what is hard and painful. If, then, the child is inclined partly to conform himself to the will of another, partly (as we shall see) to make the latter bend to his, he finds himself at once in a condition of severe struggle. and called upon either to subordinate the subjective-objective order of natural existences,1 or to dissent from the will of the persons who rule him. What is the effect on the child of this grave discordance? How will he resolve this moral

¹ I call it subjective-objective, because, as we have seen, the child forms his estimate of things from the impressions they make upon him; but this very impression gives it objectivity.

conflict, the conflict of two duties striving for the government of his will?

327. In the first place, if his animal activity determines him irresistibly and instantly to action, it may very well happen that he will forget the will of the person whom he knows he ought to love and respect, and afterwards that he will quietly forget all that is past. But, if that will is present to his mind, and he chooses to disobey it, he cannot do so without pain; and this proves that he sets obedience to it above all his other duties, and considers it as his first law. This pain or incipient remorse is the source of his moral conscience. Conscience is born in the hour when the child knows he has disobeyed that beloved will; that he has sinned against it: that he has preferred to it other things which should have come after it, but which seduced him from his allegiance. In the words of one herself a mother: "Good to him means pleasing those he loves; evil, being blamed by them. The poor child knows no better; even if he has done nothing wrong, he believes himself guilty, if he sees displeasure in his mother's countenance; and if he has chanced to give her real pain, to strike her in a fit of impatience, his repentance amounts almost to despair. I remember seeing a little child, in such a case, who, without being either scolded or threatened, gave up all his toys and went sobbing bitterly to hide himself in a dark corner of the room with his face to the wall. Although capricious and changeable, this feeling is the dawn of conscience."2

¹ I do not think that the idea of blame or praise enters into the first exhortations of conscience, but only that of being in unison with, or in opposition to, the will of the beloved one. This is, in fact, the moral obligation of the third order of cognitions, which, expressed in a general and imperative formula (certainly not known to the child), would run thus: "Man is bound to act in accordance with his fellow-men"; or, "The wills of the several men should be in agreement." It is the substance of this great moral principle which is so splendidly manifested in the child through his natural benevolence; and the greater his benevolence, the more resplendent it is.

² Mad. Necker de Saussure, L. III. c. ii.

The morality, then, of the fourth order shows itself in conscience; but it would be a mistake to suppose that this morality can be fitly expressed by the formula: Obey thy conscience. Conscience is not yet a rule of action, but only a consciousness of doing, or of having done, wrong—nothing more.

328. The formulas, then, of the fourth order of cognition (not that such formulas are expressed at this stage, but their contents are there, and are formulated later on), or, let us say, the moral principles of the fourth order, are the following:

First. The harmony of our own will with that of other intelligent beings should be set above all other satisfactions.

Second. If there is a conflict between them, every other satisfaction should be sacrificed to keep our own will in harmony with that of others.²

Both these principles contain a great advance made by the child in the field of morality.

The first is remarkable for the noble feeling by which we recognize that our highest good must be the accordance of our will with the will of others, to which every other good must be subordinate. The second is also most remarkable, as introducing the element of sacrifice into the moral order, and the virtue of fortitude necessary to accomplish it. We shall necessarily return more than once to the momentous

² I do not say here "with the will of the mother," but, "with that of others," because the special affection which binds the child to his mother is a purely accidental thing, drawn from the treasure of his heart, in which lies the inclination to universal benevolence. In order to draw out this benevolence, and bring it to bear on particular objects, the latter must be known as good and intelligent beings, and the mother has the opportunity of revealing herself as such to the child. The latter, who is ignorant that he owes his being to her, cannot love her in virtue of her maternity, but solely as the good and intelligent being in whose hands he is, whom he knows, and whose loving-kindness he feels. He would attach himself in the same way to any other woman. The child, then, is conscious of the duty of conforming his will to that of others, when he feels that will to be good, and it is only by accident that he applies and directs this principle to special persons.

consequences which must follow, in the moral world of the child, from two such grave and exalted principles.

SECTION 3. - Idea of God.

329. An Absolute Being comes already to be known as necessary in the second order of cognitions (nos. 181-182).

To the baptized, according to the profound doctrine of Christianity, is given, moreover, the feeling of this Absolute Being, the perception or positive knowledge of Him (no. 137).

Let us first consider the progress of our natural knowledge of God: we will add afterwards that which belongs to supernatural communication.

Natural knowledge of God is always negative and ideal, because man does not perceive God in it, but only reasons through induction, that, beyond all finite things, there must be something infinite, although what that infinite may be he knows not. Now, such cognition as this, simple as it is, is yet susceptible of successive increase. We have to show what this increase is, by seeking the form in which such a cognition is found at the fifth period of childhood, or the fourth stage of his intelligence, at which we have now arrived.

When the child first perceives a real entity, the mother must not imagine that he sees any limits to it: for him that first being is the only one, the all of being. He does not,

¹ I have already spoken of the nature of this knowledge in the *New Essay*, nos. 1085 and foll., where I have shown that *ideality* is the principle of being and reality its term; so that, whenever we know a being through its ideality only, we have solely that knowledge of it which I have termed *ideal negative cognition*; and when we know it through our perception of its reality, we have what I have termed positive cognition of it.

² The mind makes this induction in virtue of the integrating faculty of the understanding, which I have already shown to be the source of negative ideas. *New Essay* (no. 1454 n.) and nos. 181 and foll. of this work.

indeed, feel that all, but he supposes it, or, at all events, does not deny it, in the entity perceived.¹

Yet his sense is limited: all that he sees and feels is surrounded with limitations. The division, the multiplicity of beings, are there to contradict his thoughts and to tell him that he errs, if he believes them to be the all of being. His mother's words finally undeceive him. Not only do they more and more divide, and, as it were, break up in his thought the being of things, but with the solemn word God, which he hears pronounced, he finally comes to the conviction that there is an all of being, and that it is none of the things which have yet appeared to him. This is the first conception of a God distinct from nature that is formed in the infant mind.

In this conception, the child certainly does not remain in the ideal: he affirms a reality; but this reality has not been perceived by him; he knows not what it is, but only that it fully answers to the universal ideal illuminating his

¹ Some of the German philosophers have had glimpses of this truth, that the finite in the mind of man demands the infinite. But, 1st, they started from the subject, from the I, as the primary perception, whereas experience, on which our theory is founded, shows that the I is perceived rather late, and long after man has perceived external things; 2d, starting from the perception of the I, and assuming that it cannot take place without the perception, at the same time, of the world and of God, they are unable to give a reason for this triple perception. which remains in their system an isolated, inexplicable fact; 3d, to say that the perception of the finite involves that of the infinite, is a proposition which, if given as a primary fact, is inexplicable, and which can have no other rational ground than the universality of the idea of being illuminating the mind. If this is admitted, it follows that the supposed triple perception of our philosophers is falsely assumed to be the first human cognition. 4th and lastly, the doctrine of a triple perception has the very grave defect of not distinguishing between positive cognition, which is perception, and negative cognition, which is not perception, but a simple indicative act of intelligence. We, on the contrary, assert that the infant, with its first perception of the limited being of its mother, believes and affirms in its mind (but does not yet perceive) the subsistence of a something to which it sets no limits: it does not go from the finite to the infinite; but while its senses rest on the finite, its mind goes forth into the infinite. - See New Essay. nos. 1429 and foll.

mind. A conception of this kind is so simple that it admits of no analysis, so long as it retains this form; but it very soon advances and develops, and this is the manner of its development:—

330. The child perceives nothing of the divine reality; hence perception cannot complete his knowledge of God, or give him the material for that process of analysis and synthesis by which the human mind attains its knowledge of natural things. Its progress in this knowledge does, nevertheless, indirectly assist the conception of the divine, for this reason, that the more we learn to know of natural and finite being, the more we know of universal being, and thus in some manner ascend to the cognition of the Absolute by the constant removal of limitations. The Absolute and relative, in fact, are necessarily connected, and, therefore, the more we know of relative being, the more we know of its relation to the Absolute, and we may form a cognition of the latter consisting precisely of those relations. true that, if I remove all limits to the perfections I see in created beings, say to power, wisdom, goodness, I know nothing of what they thus become. I have not the faintest idea of what these unlimited perfections will be transformed into; but, be their unknown transformation what it may, I yet know this, that I shall have lost nothing of them, that I shall still possess all the good of them inexpressibly, inconceivably increased, and this is already a large addition to my knowledge, although it consists entirely in the relations of an unknown thing to the known, without any further perception or feeling of that unknown than I had before.

The child, at the second stage of cognition, learns to speak: at the third, the name of God, sounded in his ears, makes him aware, not only of His existence, as distinct from that of nature, but he places in God himself the intelligence

and goodness he has begun to recognize in his mother—an absolute goodness and intelligence, to which he already gives infinite admiration and affection, soon changed into adoration, if he is aided by religious instruction.

We have already seen how the child, directed by his intelligent nature, feels intimately the respect which is due to the will of others, and the superiority of that intelligent will to all other things, feels that he ought, therefore, to give up all others, rather than place himself in disaccord with it. doubtedly, the feeling thus shown by the child towards the will of his mother, or of others dear to him, is greatly helped and strengthened by his ignorance, as yet, of the limitations of that will, and the greater dignity which he attributes to it beyond what it really has; and he is prompted to this by his contemplation of universal being, with whose greatness he believes at first the real things he perceives to correspond. But, in every way the Divine will fully satisfies the want he feels of an absolute, complete, and universal will, and, therefore, he is entirely disposed to conform to it; and, as soon as he can understand what it means, he will accept it as so natural, just, and necessary, that it will never occur to him to ask a reason why. Rather, he will show eagerness to know what is the will of God, even in the most minute things, if only the natural religion in his heart has been duly cherished and cultivated. Thus, at this early age, the child's mind is inclined, even by nature, to recognize God as the supreme legislator.

331. Christianity unveils to us a mystery: it assures us that the soul of the child undergoes, through baptism, a secret but most powerful action, which raises it to the supernatural order, and places it in communication with God.¹ The effect of this, as we have already pointed out, is an intimate feeling of the reality of God. This, as it were, colors and

¹ See note of Translator to n. 137.

incarnates the natural cognition of God, making it positive, hastening its progress, giving it the life by which it becomes a spring of action in man, and bears fruit in the most sublime moral development.

Christian parents should exult in this divine treasure hidden in the souls of their children, and adore, preserve, and develop it; finally, they ought not only to gain help by the grace of the sacraments, but also by that which they may obtain for their child through offering him to the Highest, praying for him, using the sacred offices (sacramentali), to which is attached a beneficent virtue, through the power of the Church of Jesus Christ.

The development of grace is worked out through virtue and knowledge. As regards virtue, it is the love which should be sown and cultivated from the first in the infant soul. As regards knowledge, it is the knowledge of Christ which answers to the infusion of baptismal grace, and is acquired through the word of God himself. The child at that age should learn to know Christ, not only as God made man, but as the Master of men, having a will to which all must submit their wills: this is the time when the Gospel can be opened up to the youthful intelligence.

CHAPTER II.

THE ACTIVE FACULTIES OF THE FOURTH ORDER OF COGNITIONS.

332. We pass from the intellectual development of the fourth order to the human activity which corresponds to it. To treat this question fully, we should speak separately of the rational and the animal activity of the child; but this would take us too far, without any immediate advantage to our present purpose. We shall, then, as in previous sections, select for consideration only the salient points, as it were, of the child's activity, the characteristic marks and traits which should be specially observed by the educator.

ARTICLE I.

WITH THE FOURTH ORDER BEGIN APPRECIATIVE VOLITIONS.

333. Appreciative volitions are those which arise from the comparison of two objects, whether good or bad, of which we value one more or less than the other.

We have already seen that comparison begins only in the fourth order (nos. 302, 303); therefore, only at that stage can the will perform the act by which we choose between two things compared together.

It is, indeed, possible in the preceding order, i. e., the third, to prize objects; for that does not involve a comparison, but not to appreciate them, which requires a preference and antecedent comparison.

ACTS OF THE INTELLECT.		CORRESPONDING ACTS OF WILL.
First Order.	Perception of subsistence.	Affective volition, having for its term the whole of subsisting being.
Second Order.	Abstraction of the sensible qualities which awaken interest.	Affective volition, having for its term solely the sensible quality, good or bad (abstracted, that is, exactly marked off from the other indifferent qualities of the entity).
Third Order.	Judgments concerning the qualities of objects, or synthesis, by which it is affirmed that a given interesting quality exists in a given subject.	
Fourth Order.	Comparison of two objects judged of, by which a third judgment is made, giving the preference to one over the other—appreciation.	Appreciative volition, preference, choice between two objects.

If we consider that, in the second order, abstractions are formed, and thus become the objects of desire, while in the first order only existences are perceived, which alone, therefore, can be desired, it will be easy to establish and mark out the corresponding progress of the will in those four orders, as shown in the preceding table.

ARTICLE II.

FREEDOM.

334. The exercise of appreciative volition would not alone suffice to prove the child to be in possession of his free will. I have already shown that, if the appreciation and consequent choice regard the material order of things, or even purely intellectual objects, there may be choice, and yet not freedom. The latter begins to manifest itself on the first occasion on which man is called upon to compare the moral order with the inferior orders of things, and for the first time to choose between his duty and his pleasure, or the satisfaction of some casual instinct. (See Anthropology, nos. 543-566.)

But this first act takes place precisely at the fourth order of cognitions. The collision between the things which attract him and his sense of duty, occurs in the child as soon as he becomes aware of a positive will in opposition to his natural inclinations. Now, the knowledge of this will comes to him in the fourth order. We have seen how high he holds it; how he feels that it is something far above all other things, and how the respect which he is disposed to pay to the will of a Being that knows and is known to him, is so great that, if for any motive, under the influence of temptation, he prefers to it any other good whatsoever, he feels bitter remorse, and cannot live without returning to peace and concord with that will.

From want of observing this tendency of the child's na-

ture, Rousseau was led into a miserable and unworthy judgment of human nature, maintaining that, at first, force, and not moral means, should be employed to control it, - the idea of duty being too far above the infant's capacity. How entirely is this system belied by facts! How utterly has the presumption of sophists dehumanized humanity! It is time that the present age should reconquer, step by step, the dignity which has been lost, and this it is doing from day to day, by the victorious power given to the truth through accurate observation of the facts of human nature. It is such impartial observation that reveals to us in the child this wonderful and comforting truth, that he obevs moral duty sooner than he obeys force; he obeys the former before he has learned to know the latter. Once more, let us look at this matter through the wise and clear-sighted eyes of a mother, who read accurately her children's minds, and observed and understood them thoroughly.

"More attentive observation," says Mme. Guizot, speaking of Rousseau, "would have taught him that moral necessity, i. e., duty, which is a portion of our nature, born with us, is felt by children long before physical necessity, the knowledge of which comes from without, through a variety of experiences and of comparisons, impossible for the child till long after a natural instinct has made him feel the moral necessity of obedience. There is not a nurse who does not know that the way to make a child resist is to try to take from him by force what he holds in his hand, whereas a sign with which he is already familiar is sometimes enough to make him let it go; and if he still resists, he is struggling, though feebly, against the pricks of his own conviction; his hesitation is seen in his countenance; he seems to be looking for a cessation of the will which displeases him, and thus to be restored to freedom. But when, at last, it is

more strongly pronounced; when, in order to make him obey, an expression of displeasure has been added to that of will, he yields with a look of discomposure which is neither anger nor fear, but the disturbing sense of a fault. The small features contract, but not violently; he looks at you; he is not yet crying: his whole being is hanging in suspense between the tears ready to start and the expectation of the inward smile which may quickly return and bring back brightness to the poor little face, scarcely yet formed, and yet sufficient to reveal a soul." 1

The child, then, when it has arrived at this stage of intelligence, chooses between good and evil, — enters into possession of his freedom.

335. From this first appearance of free action we must infer a certain degree of moral strength with which the human being, who takes the side of moral goodness, resists and overcomes the opposing temptations. This moral strength, which we have termed practical force, at first shows itself only by snatches, and often gives way when the trial is severe; but its strength increases, or else finds help and support on which to rest, thereby testifying to a capacity for progress, and to a certain development in the mind of the child.

ARTICLE III.

HOW BELIEF AND DOCILITY NATURALLY INCREASE IN THE CHILD.

336. If the belief and docility of the child were always fostered by false and unreasonable teaching, or teaching the reason of which he is incapable of understanding, his budding virtue might easily be suppressed in the cradle. An inward conflict of the saddest and most painful kind would arise in his mind. That external will which had appeared to him as something divine, worthy of infinite reverence, would be changed into something mysterious, inexplicable,

of inconceivable malignity. Utterly confused from the first, not knowing whether to listen to the voice of nature revealing to him, in the first will he feels, a supreme dignity, or, to his own experience, which shows it to be blind and lawless, he would be led to moral hopelessness and the depravation of his own feelings. Providence, however, has not permitted that those to whom the bringing up of children is intrusted should be wholly bad or wholly unreasonable. Whatever in them is orderly, reasonable, kind, forms the beneficent element which strengthens in the child those two earliest seeds of virtue deposited in him by nature, — I mean belief and docility.

The child becomes more respectful to those in charge of him, trusts them more, is more inclined to obedience, the more he can see the truth and the use of what he is told or commanded.

The best educator will, then, be he who best knows how to strengthen in his pupil the habits of belief and docility, whose words, narratives, and commands have most of the truths which can be understood by the child, and from which he can draw inferences, and most of the utility which he can observe and try for himself.

337. In fact, when the child has formed a belief which ne finds to be true, and has drawn inferences from it, he becomes more docile, and is anxious to learn more from his teachers; for he has found that he owes all he knows to having believed them in the first instance. This fact has been already noted: "As his (the child's) knowledge is based on the teaching he has received, from the moment he becomes interested in what he has learned, he feels also the need of believing what he is taught, and finds in the belief already accepted the foundation of new ones. We believe because we have believed, and because the authority to which we have yielded our belief appears to us to have the same right to

the same belief each time that what it proposes to us to believe is not more incredible than that of which it has already persuaded us; and, without examining the motive of our previous adhesion, we make the latter the motive of our subsequent one."

ARTICLE IV.

THE DESIRE TO INFLUENCE OTHERS.

338. Not even the wise adaptation of lessons and commands, or the child's tendency to belief, strengthened by love of the knowledge gained through it and the sense of advantages derived from docility, can, however, prevent the will of the teacher from frequently coming into perilous collision with the lower propensities of the child.

At first, when the child finds himself in this painful conflict, and yet clings to what he feels to be his duty, namely, adherence to the will of others at any sacrifice, so long as that will is present to his mind, he cannot resist it without the bitterest remorse. But, when the strength of the temptation and the attraction of the forbidden thing take away his attention entirely from the will which is his law, and, as it were, hide it from him for the time, so that he can no longer see it, he is easily drawn away, and then his fall is certain. That moment of darkness may be instantaneous only, and is often followed almost immediately by the returning perception of the law, and by the remorse which he tries, in vain, to hide and suppress.

The child, however, does his utmost to gratify his desire, and yet avoid the terrible misfortune of acting against the will of others. Hence, while at first he inclines to conform his own will to theirs, later on, when passion wakes up, and the internal conflict begins, he strives to win over their will to his, seeking in one way or another to preserve the unity

of the two, which he shrinks from destroying, however strongly tempted to do so.

This, then, is the age at which children begin to manifest the intense desire they have to influence the will of others, to gratify which they early display such marvellous dexterity, such wonderful quickness and penetration.¹

CHAPTER III.

INSTRUCTION ADAPTED TO THE FOURTH ORDER OF COGNITIONS.

ARTICLE I.

HOW LANGUAGE SHOULD BE THE FOUNDATION OF ALL INSTRUCTION OF THE YOUNG.

339. In speaking, now, of the instruction adapted to the fourth order of cognitions, I shall not repeat what I have said in treating of the other orders, much of which applies also to this and the following ones. I shall rather, following the same method as heretofore, touch, in connection with this order, on certain principles of teaching, which should be borne in mind through each of the succeeding ones. It is in this order that their necessity first makes itself felt, although it becomes more and more apparent in those that follow.

One of the fundamental principles which should govern the instruction given from first to last, is to consider language as the universal instrument provided by nature for the intellectual development of man, and, therefore, to make the most careful effort to make sure that this noble instrument shall fulfil its purpose; that words and thoughts shall be accurately connected; that man, in short, shall become more and more versed in language, but so that his progress in that shall also be a true progress in ideas and in knowledge.

¹ To sum up: To the first order of cognitions corresponds benevolence towards the person known; to the second, benevolence towards the will of that person, made known through speech; to the third, the conforming of the will to that of others; to the fourth, the endeavor to bend that of others to the child's own.

and representations of things. It would be a great work, worthy of a philosopher and a philanthropist, to form a collection of pictorial and dramatic representations adapted to the gradual development of the infant mind.

The exercises to which we have given the name of oral should also be continued, and to them should be added exercises of memory. The latter may begin with short moral precepts, expressing only the morality proportioned to the child's understanding, i. e., that which contains no moral formulas above the order of cognitions to which he has attained, or at most only those of the order immediately above. A collection of such precepts duly arranged according to the grades of cognitions, which should constitute so many grades of instruction, is also a much needed and necessary work. A similarly arranged collection of poetry would be equally useful in exercising the memory of children.

342. The help of music should not be sought as a mere pleasure to the sense. The child himself, frivolous as he seems, and swayed by his sensations, requires more than that. He is intelligent, and seeks first intelligence in all things, even in his sensations, and afterwards emotion and delight of the purest kind which spring from them. this reason, I firmly believe that music could be made a most useful instrument of education, if applied by the teacher to touch with emotion those moral precepts and moral representations which the child already knows and In this way music, instead of being meaningless or predominating over thought, would become the handmaid of language already communicated to him, and he would listen to it, as to a sweet and tender interpreter of the noblest conceptions his soul has yet attained, but which hitherto have lain there without life or color.

But who shall find such music as that? Who shall use it with the sobriety, the self-sacrificing courage, to put into it

neither the beauty which is purely sensual, nor the beauty above the child's comprehension? Who shall understand and value music expressing only childish thoughts, clothed in childish words? What security have I, that even these suggestions of mine may not be misunderstood, and that the attempt to put them in practice may not lead to abuse?

ARTICLE III.

ORAL EXERCISES IN THIS PERIOD.

343. Oral exercises should be continued in this period as a sort of prelude to the teaching of reading and writing, being made more and more an exercise of intelligence.

As, in the preceding period, the exercises turned upon nouns and verbs, they should now introduce particles, or the connection of nouns with each other, of verbs with each other, and of nouns with verbs. This is, in fact, teaching to speak, if properly done. There are ideas and thoughts which, although within the reach of the childish understanding, the child finds extreme difficulty in expressing. We must first point out to him the thought to be expressed, and then lead him to find the most fitting and effectual way of giving it utterance.

But, for the success of these exercises a book is wanted, in which some expert should collect a number of thoughts adapted to each order of cognitions, and also the fitting mode of expressing them. With such a book, it would be easy to lead the child gradually from the thoughts and the

1 Note of Translator.—All that Rosmini mentions in this article, as desiderata, has been long since supplied, with more or less success, by the infant school system, and far more efficiently by Froebel's Kindergarten system, every part of which is directed to the gradual development of the child's whole nature. Froebel's Mutter und Kose-Lieder, of which more than one translation has been made into English, are the complete realization of Rosmini's ideal of music for children, while his games and story-telling supply the active dramatic element which Rosmini, with the same deep insight into child-nature, wished to add to the passive element of pictorial representation.

mode of expression proper to a lower order of cognition to those proper to the higher orders. I include expression as well as thought, for the same thought may be variously expressed, and yet always fitly,—adapted, that is, to one order of cognitions, and not to another.

Certain constructions are difficult for children, and why? Because they belong to an order of ideas which is beyond them. The wise man who should compose the book we want, would thus have to classify according to age the constructions and different forms of expression, and the child would have to be taught from these by degrees.¹

How greatly would the child's power of expressing himself properly be thus increased! How would the facility of thinking increase with his skill in the use of language, the universal means of intellectual development! How much time would be saved in school! With what ease will the child later on write down his thoughts who has learned to speak them in appropriate and fitting words!

ARTICLE IV.

INSTRUCTION IN READING AND WRITING.

344. At this period should also begin the teaching to read and write.

¹ The language of children is full of ellipses. Mad. de Saussure has well observed this. "Ainsi, je suppose," she says, "qu'on dise à l'enfant, en lui tendant la main: 'Voulez-vous venir au jardin avec moi?' Il répétera, 'Oui, oui, venir au jardin avec moi!' le geste et le mot de jardin ayant suffi à son intelligence. Si au contraire on lui disait en faisant signe de le repousser: 'J'irai au jardin sans vous,' il répéterait long-temps en se lamentant: pas sans vous, pas sans vous.' On voit par là que tout en comprenant fort bien la phrase entière, il n'attribue pas un sens à chaque mot." (Liv. II. c. vi.) The peoples of antiquity, who always exhibit the phenomena of childhood, are also full of ellipses and reticences. (See further observations in the Storia Comparativa e Critica de' Sistemi morali, Cap. V. Art. vii.) Now, the exercises we are proposing should serve, be it remembered, to make the child express distinctly all the ideas in a sentence, even those which, in his natural language, he would leave unuttered, and this is their principal advantage. But the expression of the ideas should still be his own, that is, on the same level as his understanding.

Uttered words, languages, are the signs of ideas; written words, writing, are the signs of words.¹

Writing thus belongs to the order of cognitions next above that of language, which is the third. But we have observed that language itself embraces more than one order in its various parts, and that verbs, which are among the most important, are not understood before the third order is reached. The child must then be allowed time to get a sufficient understanding of the words spoken, and I should advise deferring teaching him to read till he is well advanced in the fourth intellectual order, which generally corresponds with the second half of the third year.

This interval, before we begin to teach him his letters, may be most usefully employed in the oral exercises which will make him perfect in the mechanism of pronunciation, give him a larger vocabulary, and, above all, make him exercise his understanding, after which he will begin learning to read and write fully prepared and capable of rapid progress.

Nevertheless, this learning to read and write which, as we have seen, should always go together, should not be hurried on, but should rather proceed slowly, seeing that our object, which should never be lost sight of, is not to teach reading and writing alone, but, with these, many other things much higher and more important. It should be remembered, also, that no teaching should be simply mechanical, but that it should always tend to exercise all the child's faculties and to be a moral training besides. These principles have been loudly proclaimed in Italy by men who are an honor to her, for their goodness of heart and elevation of mind.²

¹ It is evident that we are speaking here of the mechanical process of writing. The writing which is the immediate sign of thought should rather be called language than writing.

² The Abbé Taverna defends as follows the method he prescribes of detaining children a long time over the study of words: "They (the children thus taught) are acquainted with very few of the relations existing between the many objects

mode of expression proper to a lower order of cognition to those proper to the higher orders. I include expression as well as thought, for the same thought may be variously expressed, and yet always fitly,—adapted, that is, to one order of cognitions, and not to another.

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This interval, before we begin to teach him his letters, may be most usefully employed in the oral exercises which will make him perfect in the mechanism of pronunciation, give him a larger vocabulary, and, above all, make him exercise his understanding, after which he will begin learning to read and write fully prepared and capable of rapid progress.

Nevertheless, this learning to read and write which, as we have seen, should always go together, should not be hurried on, but should rather proceed slowly, seeing that our object, which should never be lost sight of, is not to teach reading and writing alone, but, with these, many other things much higher and more important. It should be remembered, also, that no teaching should be simply mechanical, but that it should always tend to exercise all the child's faculties and to be a moral training besides. These principles have been loudly proclaimed in Italy by men who are an honor to her, for their goodness of heart and elevation of mind.²

¹ It is evident that we are speaking here of the mechanical process of writing. The writing which is the immediate sign of thought should rather be called language than writing.

² The Abbé Taverna defends as follows the method he prescribes of detaining children a long time over the study of words: "They (the children thus taught) are acquainted with very few of the relations existing between the many objects

I think that reading and writing may most conveniently be taught together, or alternately, as two parts of the same study, rather than as two separate studies. Both belong, in fact, to the same order of cognitions; for to write is only to add the action of the hand to draw the characters which, being already known, require no fresh

they observe; but they have in their hands the instrument and the method whereby to discover them - I mean language; because care has been taken not to lay on their memory an idea without the word proper to it, and the same care has been used not to teach them words to which they cannot attach the corresponding idea, and the construction of language is directed to express by signs the relations which exist between ideas, and, therefore, between the things which awaken ideas. In this way they will acquire the habit of neither uttering nor hearing words without knowing or inquiring their meaning; they will accept only such ideas as they find included in those they already possess, or in the new objects offered to their senses. Their ignorance will appear very great; but be proud of it, all you enlightened teachers; for equally great is already their desire for knowledge. This is the ignorance in which nature long detains us for our good. The pupils of pedants will have more words, but have less knowledge, and will find, perhaps, insuperable obstacles in the way of acquiring more. In yours, on the contrary, good sense is already present, that intellectual habit which is early formed in children, when they are guided, not by authority, but by the constant and uniform testimony of their senses; a habit which, in the course of their lives, will guide them into the path of truth, will teach them to distinguish the ideas of which the objects exist, from those of which the objects either do not exist or are not known, to distinguish in everything, if not the true from the false, at least the line which parts the known from the unknown." Further on, he says: "It is true that the language of such children will be scanty, but only because it will be exactly determined. They will soon be able to use it in forming analyses and combinations, and for comparison, abstraction, and generalization, etc. They will not be great talkers, because accustomed to speak only of what they want and understand. The answers of Sparta's children were ready and short, because their parents desired to have from them only the words necessary to express what they wanted. We need not fear that they will become used to taciturnity, and hence that they will not find expressions at need. Let them be left a good deal to themselves, to their own free activity; their imaginations will extend the limits of their language. Childhood finds relations of similarity between the most dissimilar things. Every child is a coachman; his sticks are his horses, the chairs a carriage. The poorer his language, the more is the human being driven, by the desire to express his thoughts, to find new combinations. The greater our difficulty in expressing what we feel, the more is our attention driven inwards, and the more entirely do our thoughts become our own. The most truly original poets appeared when language was poorest." - Novelle Morali e Racconti storici. Discorso preliminare.

learning. It is an external action, which is all the better joined to the intellectual action that both are united almost indivisibly by Nature herself. Thus, if, after showing a child the letter a, and teaching him its sound, I make him draw its form with his own hand, he will never forget it again, for, as Rousseau observed: "Children forget easily what they have said or what is said to them, but not what they have done or what has been done to them." The action, then, the making them do a thing, is the best means of teaching it and fixing it in their memory.

345. But in reading, as in writing, we must, above all things, graduate our teaching, and both parts of it must be kept constantly in view, *i. e.*, the mechanical and the intellectual, both also being duly applied in aid of moral progress.

It is evident that, as language serves admirably to analyze the discourse of thought, so reading serves to analyze the words, decomposing them into the elementary sounds of which they consist; and, finally, writing serves to analyze the letters themselves, the elements of words, calling attention to each part of which the letters are composed. There is, therefore, a progressive analysis to be made, of which a wise teacher will know how to avail himself.

There is, also, a different direction given to attention. In mere speaking, our attention ends with the thought to be expressed, and the signs of the thought composing language receive only a slight and relative attention; but in reading, attention is directed to the sound of words; the printed characters we look at arrest our attention only for the moment necessary to make them the starting-point, as it were, for reaching its real object, the sound of the words. Finally, in writing, attention is fixed on the letters, the forms, of which we have to draw a copy with the hand, and which become the terms of our action. Thus we find the

terms of our intellectual action, wherever attention is arrested and fixed, wherever it throws its light, leaving the rest in darkness, like a torch borne swiftly along, lighting up only for an instant each spot it passes over. This law of human attention should also be carefully noted by the teacher; for, duly considered, it gives him the means of directing and regulating the child's attention at his pleasure.

We want, then, a method of teaching reading and writing together, given in one book and duly graduated. This is another task for those who cultivate the great art of education, toward the accomplishment of which, however, noble attempts have already been made.

ARTICLE V.

346. A similar book should be composed to give children graduated teaching in arithmetic. For example: we have seen that the child, when he has reached the fourth order of cognitions, can form a distinct idea of the number three. Hence, as the arithmetic of the previous periods should stop at teaching the properties of the numbers one and two, that of the present period should be confined to teaching the relative properties of one, two, and three, and their various combinations, expressing the latter so as at first to bring out only the relations between those three simple numbers, and, later on, those between their various combinations.

ARTICLE VI.

UNIFICATION OF IDEAS AND THOUGHTS.

347. Besides the forms of knowledge already described, as fit to be imparted to a child of the age we are considering, it is time now to introduce a right order into his knowledge. This attempt to co-ordinate the things he knows should begin as soon as his mind is capable of admitting an order

in its own ideas, that is, of reducing them to certain principles or leading ideas. We have seen that, in the preceding period, the human mind begins to work from definite principles, which year by year advance in growth and completeness. We should make use of these principles, as so many central points round which ideas may be grouped. If, therefore, these principles begin to appear at the third order of cognitions, a wise teacher can already make use of them to the advantage of his pupil in the fourth order, provided he faithfully observe the grand rule of education we have so often repeated, i. e., to make use, in connecting the ideas of his pupils, of those principles only which the child's mind has already received. If we attempt to make him use any others, we demand from him an impossibility.

Great skill is needed, moreover, to obtain the intellectual and moral progress we aim at; and the ideas commonly entertained about the manner of bringing order into the cognitions of children are, as a rule, sadly incomplete and inadequate. It seems desirable, therefore, to lay down in this work the proper order to be introduced into the juvenile mind, so as to obtain the best possible results.

- 348. The wise teacher will endeavor to procure three advantages for his pupil, i. e.:
- (1) The assistance to his memory which is derived from the association of his ideas.
- (2) The introduction, so far as it is possible, of unity into his thoughts.
- (3) The foundation of this order on a true, not an arbitrary, basis, i.e., on the universal order of things; for it is this which gives moral importance to the unity of thought.

These three things are widely different, and their differences must be carefully noted. They are very apt to be confounded together. Sometimes it is believed that all that is required in order to introduce order into the human mind

is to create the largest possible number of ideal associations; others go farther, but think they have done enough when they have brought the child to heap up, as it were, all his ideas round a leading idea, or to connect them with a given principle, without troubling themselves as to the choice of the connecting idea or principle. They thus create a fictitious, instead of a true, order, representing rather fallacious human opinions than the reality of nature, the immutable truth.

SECTION 1. - Association of Ideas.

349. It must be carefully observed that memory and recollection are helped by any kind of association of ideas, but that order between the ideas themselves does not come from every kind of association; that it is, on the contrary, the association formed from accidental and minute analogies between incongruous ideas which gives a frivolous, unstable, capricious and wholly illogical character to the mind. Delirium itself is maintained by a rapid and extravagant association of ideas; the frivolity of children has the same origin. We must then seek for sensible, in lieu of frivolous, associations, and that is already no easy matter. It will be of some use in smoothing the way to pass in review here the principal kinds of association of ideas, or, rather, the various grounds on which they can be formed into so many natural groups.

350. The first of these grounds is the unitive force of the animal nature, which has very many functions and produces innumerable phenomena. The intelligent mind lets itself at first be guided by the animal nature, and thus, when two feelings are united by the animal unitive force, the mind sees as united all the ideas or cognitions to which those feelings correspond. To this unitive force belongs, as its

¹ We must refer to all that we have said elsewhere on this *unitive force*, and the singular phenomena by which it simulates intelligence. (Anthropology, nos. 455 and foll.)

principal function in the matter we are considering, the animal fancy or imagination, which joins together the images that have once appeared in conjunction, either through contiguity in space, or succession in time, or some similarity in the impressions produced, or some analogy, occasionally of the most far-fetched kind. Any portion of this complex train of images which is awakened in the mind, calls up and presents all the others; and what I have said here of complex images, that is, of images resulting from several others joined together, no matter how, is true of all the other functions of the unitive force. Through it, the animal sets in motion, by an instinctive act, not one faculty, but a whole group of faculties. This group moves in such perfect accord that it is enough that the animal be impelled to an act belonging to any one of them, and at once he performs the actions belonging to all the rest. It is from these actions that the intelligence of man receives its materials, and hence the act of any one faculty suffices to call up the recollection of a whole condition or state of the body, and of all those things to which this condition and state are referred. The reason of this conjunction of various images, sensations, and instincts, which are all acts of the various animal faculties, lies wholly in the unity of the subject, in which all its powers and their actions are rooted.

351. The second reason is the unitive force of the intelligent animal being, man. Through this human unitive force, the order of intelligence is brought into accordance with the animal order. Single or isolated action of the latter can scarcely take place, without setting in motion the intellectual order, and vice versa. Man can scarcely act as an intelligence without, at the same time, touching some key, as it were, of the animal order.¹

¹ This second ground of the association of ideas is the foundation of all languages and all writing. By these artifices man proceeds always from the order of sense (connections and other visible signs) to the order of the intellect.

352. The third ground is the real relation linking together ideas and thoughts, as when an elementary idea is contained in the wider synthesis of another, or a consequence in its Such connection and association as this is widely different from the two former kinds, as the following examples will show: I meet some one, and immediately the image of his parish church is recalled to my mind. This is an association of images, and one which might be connected and recalled together in the fancy of a purely sensitive being. Here, then, we have the first ground of association. pose, on the other hand, that what the sight of that person at once recalls to me is the demonstration of a beautiful mathematical theorem, which I have heard him expound. Here comes in the second ground of association, the unity of the animal-intelligent subject, for the association is between animal sensations, such as the images of the person, of his discourse, etc., and the acts of the mind, such as the ideas which made up the demonstration: the union here of the two orders, animal and intellectual, is grounded on the unity of the subject, man. The case would be the same, if the recollection of the mathematical demonstration should recall to me the face, or only the name, of the master who gave it; except that in this case the passage would be from the intellectual order to that of the senses, instead of, as in the former one, from the senses to the intellect. observed that in none of these cases is there any intrinsic relation between the two things associated in our minds. There is not the slightest resemblance between a person and the tower of a church; and a person and a mathematical theorem are things so unlike, of such a totally different nature, that not only can they not be included in, or assimilated with, each other, but the one belongs to the order of real things, the other to the order of ideal things, and thus they are separated by a categorical distinction. This would not be

the case if, when a principle recurred to my mind, the consequences of that principle, which, taken together, form the demonstration of the theorem, should at once recur to me also. In this case, ideas recall ideas; the action is entirely within the order of intelligence. The action might equally lie within the order of intelligence, even though its matter belonged to sense. Thus, if at the sight of a man, I at once recall that he is a being composed of body and soul, there is an association of thoughts; for, between the thought of the man and the thought of his component parts, there is an intrinsic and intellectual relation, although the thought of the man may have been suggested by the senses or the imagination, on the occasion of my seeing him or remembering to have seen him.

It appears, then, that, if we aimed only at aiding the child's memory, without regard to the choice of ideas, any one of these three species of association would serve our purpose. It is evident that the art of constructing an artificial memory may be equally well founded on the first, second, or third species of association, or upon all three together.

SECTION 2. - Order of Ideas.

353. But this, as we have already said, does not suffice for the moral progress of the child. The latter demands several things: (1) that the child should learn the relations between ideas; (2) that, by means of these relations, which become so many general principles of thought and reasoning in his mind, he should acquire facility in passing from the one to the other, not by the simple act of recollection, but by the use of his own reasoning powers; (3) that this passage should be made by him freely, and not in virtue of some unnecessary and casual instinct, so that he may gain a mastery over his own cognitions and thoughts, keeping them ready to use at will.

These advantages we can obtain only by leading the child to form associations of the third species, those resting on the intrinsic relations of the ideas and things known to him. If we consider that each relation between known ideas and things is learned by us through a single act of the intellect, it will be easy to reduce such relations to a single formula, viz., that every intellectual association consists in discerning the elementary cognitions composing a complex cognition, and in passing from the elementary cognitions to the complex one.

Complex cognitions are: (1) the larger classifications of things, including minor classifications as their elements; (2) the ideas of composite things, in which the ideas of the component parts are included as elements; (3) and still more general, the principles in which consequences are contained as elementary cognitions.

A good teacher should, therefore, know how to observe accurately, and to find out, by opportune questions and experiments, what are the classifications formed in the child's mind at each period of childhood, together with the ideas he has of complex objects and principles. Starting from these data, which he finds already existing, he should make his pupil descend gradually from the widest classification he has framed to narrower ones, and from these ascend again to the former, making him analyze the complex objects known to him, and from the parts already discerned reconstruct the whole. Finally, he should lead him from principles — but, be it understood, his own principles not another's — to consequences, and back again to principles.

It is evident that such exercises are admirably adapted to bring order into the child's thoughts, by causing him always to sum up things under their widest classification, teaching him at the same time to distinguish the parts of things, but as united in their whole, and attaching, as it were, to the dominant principles, their innumerable consequences.¹

It must be evident to all that the child learns by this method what are the natural links between ideas, and acquires facility in mentally passing from one to the other, besides gaining command over his own thoughts. For, the mind which has grasped a wide class of things can, at will, pass to the consideration of a smaller class, which, without the former, would be impossible to it. Whosoever, therefore, knows a whole, is able to know its parts, and whosoever has grasped a principle, can, by the virtual extension of it, pass at will to all its consequences. It may thus be said, with truth, that each man's freedom of thought extends just so far as the actual complexity of his cognitions.

355. In giving this greater attention to intellectual associations, we do not neglect the two other species of cognition, derived from the animal, and from the human, unitive force, but we co-ordinate, and submit them to reason, so that man may acquire the mastery over them and use them freely for his purposes. And why is it easier to learn by heart a discourse which has a meaning to us than a mass of disconnected words, thrown together by chance? Because to recall the succession of sounds only is a mere unreasoning process; but, if the sounds convey a meaning, the order of ideas quickly comes to our aid and makes even this unreasoning operation easier.

Vice versa, the animal association assists us in recalling ideas, together with their order; for the order of our ideas depends on other connecting ideas, which may be attached to visible signs, and thus the visible signs may recall to the mind the order we want. But we obtain this result, not

¹ One of the principles most readily manifested in the infant mind is that of analogy. By following this natural lead, an immense use may be made of it in the instruction of the young; but it must be done with due care to put them on their guard against its fallacies.

from nature left to herself, but from art. It must have for its antecedent a mind which, being already in possession of ordered ideas, attaches to them the corresponding sounds. The sounds or visible signs then serve admirably, either to communicate to others the same order of ideas and to recall to the mind itself the ideas so ordered. This is the history of the invention of reading and writing and the reason of the enormous assistance they have given to the progress of the human mind.

SECTION 3. - Moral Order of Ideas.

356. It is only the association founded on the order of ideas that can be of service to morality.

We have seen that the two first species of association are based on the unitive force of the subject: it is the unity of the subject which produces them. The third, on the contrary, has its reason in the object itself, that is, in the truth. This observation suffices of itself to explain why the latter species of association alone has a close relation to morality. It prepares the way for morality; for virtue consists in nothing else than the voluntary recognition of the objective order.¹

But the objective order must be completely recognized by the will; and the more completely it is so recognized, the more moral does it become, and the more of virtue will there be in the man. This means that education should tend: (1) to connect the child's ideas and thoughts by their natural and true relations, and not by false and arbitrary ones; (2) that this connection of ideas should be as complete as possible.

It will be seen at once how this doctrine agrees with the supreme principle of education I have elsewhere laid down, and enunciated as follows: Man must be led to conform his mind to the order of things outside of him, and not to

¹ See Principi della Scienza Morale, Cap. IV.

strive to conform outward things to the casual affections of his mind.1

357. I have also shown that education should embrace the mind, the heart, and the life of man.2 Now the heart. that is, the will together with the affections, should be in accordance with the mind, and the life with the heart. the mind is thus conformed to the objective order of things. if it possesses the serene light of truth, not the false and confusing lights of opinion and prejudice, the heart will have a type, as it were, on which to mould itself, and the life will be a continual image of the heart. If the life is to be a continual working out of universal good, the heart must first be filled with universal charity; and the latter cannot enter the heart unless the mind is so disposed as to exclude no form of knowledge, but to embrace all. The universality of an impartial mind produces the universality of the benevolent heart, and the universality of the benevolent heart produces the universality of a good life. The child's mind should, then, be educated to recognize all the connections of things which he is capable of perceiving at each period of his childhood, in other words, all of the objective order which he is capable of recognizing, and, to bring him to this, the association of things in his mind must not be left to chance, but be duly ordered, the most important coming first, the less important afterwards.

358. As being is one, and there are three categories, so, likewise, there is one supreme unity in things, and three modes of relation.

The supreme unity is formed by the idea of God, the essential being. The unity of God should, then, be made predominant in the mind of the child. To God, as the

¹ See Saggio dell' Unità dell' Educazione, inserted in the Opuscoli Filosofici, Vol. I., p. 234, and in Vol. II. of this Collection. [Turin, 1883, pp. 1-70.] ² Ibid.

Creator, the Preserver, the Fountain of all Goodness, the child should refer all things; but this must always be done by using the idea proper to the period the child has reached. In the first and second orders of cognitions, he conceives God as the complement of being: he conceives him as the real, intellectual, good, all in one.

To refer all things to God and merge all things in Him, through the widest generality of expression, is, therefore, at once the easiest way and the first step towards making children feel and understand the predominance of the idea of God, as almost absorbing all others.

The same idea of God continues in the third order, but it is no longer so absorbing; it is distinguished from other ideas, and gains in greatness by the distinction. Already a secret sense of adoration may be awakened. Self-surrender, the sacrifice of all things to God, is the second step, the second mode of subordinating that which is contingent to the Supreme Being.

In the fourth order God is manifested as Will. That is, God having been distinguished from His creatures, we distinguish in God Himself His perfect will from His intellectual nature. To conform our own wills without reserve to the divine will, to bring into due subordination every will to that one alone, is a principle which again gives unity to our other ideas in the idea of God. It is the third step, the third mode of understanding and perceiving the connection between all other things and the Supreme Being.

In the fifth order some knowledge can be attained of the divine precepts, and to accept them with absolute devotion is the fourth mode of referring all things to God.

Finally, in the sixth order, God begins to be known as Intelligence or Supreme Reason. It is then only that we discern in God the three forms of His being, — the moral, the ideal, and the real, — which at first were all indistinctly

merged in the idea of the Absolute. This opens up a fifth mode of referring all things to God, grounding in Him the reasons of all things, and in all adoring His eternal wisdom.

These five modes of co-ordinating all created things under the supreme unity of the Creator, and thus bringing under the highest and most natural order the mind, the heart, and the life, should be deeply studied by the enlightened and Christian teacher. How to develop these five successive degrees and different kinds of religious instruction, and to find the proper methods of applying them and gradually introducing them into the minds of children, might be made the subject of a book most important and necessary for the furtherance of sound education.

359. Coming now to the order in the child's cognitions which should be derived, at each period of childhood, from the categories of being, we find that, as there are three of these, so there are three principles of order and unity.

Let us begin with ideality. This category of things derives its unity from universal ideal being. It will be desirable, then, to make the child regard in all things their being, and to teach him to look upon the modes of being which constitute the differences between things as simple limitations, or, if you will, acts of it, thus carrying him down from the largest to the smallest class of things. But what shall be the degrees of this scale? They must differ in each period; and the wise teacher will find them by teaching the child to talk, and, by watching and reflecting on his words, he will discover what classification of things he has made for himself at each period. These classifications will certainly be grounded, as we have already seen, on semi-abstract ideas; but the latter will vary with the development of the child and constitute classes of varying comprehensiveness. In any case, when we have ascertained what are the semi-abstractions on which the child therefore, by adults, is an act of base ingratitude. It is true that to the thoughtlessness and selfishness of adults this proposition is wholly incomprehensible. The child's ignorance and weakness, the fact that he is helpless in their hands, unable to defend himself or even to plead his cause, seem to them sufficient grounds for disregarding their tender brother, and believing themselves entitled to make of him, and to do to him, what they please, be it good or bad.

We have also seen that the spontaneous benevolence of the child is a moral thing, and duly taught him by nature herself. Whosoever, then, abuses the credulity of childhood, which is the effect of this benevolence, profanes a sacred thing and despises the moral and divine element which gives its highest dignity to the intelligent soul.

Again, we have seen that the child's benevolence should not only be carefully respected as a moral thing, but that its cultivation should be made a special study and be so directed that it may preserve and increase its moral value, and attain its end, i. e., universality, so that the child shall love all persons, and all in their due degree. The ground of this universality of benevolence, and the lines it follows, will be found in the order of thought which we have recommended to be gradually introduced into the child's mind, as he becomes capable of it. This most excellent order of thought is no other than TRUTH, in its fulness and its purest light; for truth is in itself order, and in the mind where there is disorder there is also falsehood. judge from this what care, what earnestness, what uprightness are required of the parents and teachers of children. With what care should these, if they are wise, weigh all their words, so as to introduce nothing that is false into the child's mind, no vulgar error, no prejudice, no exaggerated opinion, no partial estimates. On the other hand, who but the really wise and good will be convinced that it is of the utmost importance to keep the child's mind absolutely pure and free from every sort of prejudice, whether national, or belonging to family, or condition, or rank? Yet only in this way can children be brought into the best disposition towards virtue, knowledge, and happiness. Happy they to whom Providence, in bringing them into the world, has allotted such teachers!

364. Besides the very serious mischief done to children by every seed of falsehood introduced into their minds, the want of sincerity and truth in their teachers retards their moral development. I have already shown that the child's readiness to believe and his docility increase, when he finds from experience that what he has believed helps him in further processes of reasoning (nos. 336, 337); but, if he finds that this help fails him, and what he leaned upon is false, his trustfulness will be shaken, instead of confirmed and augmented. Nothing can be more pernicious to the child's moral nature than the distrust thus engendered.

"To deceive a child is not only to give him a pernicious example, but it is to damage ourselves fatally in his eyes forever after, and to renounce his whole education, of which we can never again be the instruments. How can we fail to feel that our credit in the minds of children depends wholly on their profound and intimate conviction that we are incapable of deceiving them? Nor let it be imagined that their trust will long remain blind. It might, perhaps, if they had no reason to doubt us; but there are people who do not even take the trouble to conceal, with any care, the bad faith and untruthfulness with which they permit themselves most frequently to treat them; their empty promises come to be known for what they are, and mark an epoch in the children's minds.

"Everything can be atoned for to children except falsebood. You may be impatient, violent, unjust for a moment; it is very bad; but they may forget it. What the child most wants to know is whether he can trust you; the whole future in his thought is included in that question. If he has found you always true to the letter, your moral influence remains intact; but, if he has once found you false, you are henceforth to him only a material and irregular force, the action of which cannot be foreseen, and, therefore, need not be taken into consideration."

ARTICLE II.

OBEDIENCE NOT TO BE ABUSED.

365. The same danger that arises from abuse of the child's trustfulness arises from abuse of his obedience and docility.

The supreme law of education should be that everything in the child, mind, heart, and life, should be true. The child's mind maintains its rectitude by following the universal order of ideas.² The heart preserves its rectitude, in like manner, by the orderly universality of its benevolence, and the life receives and maintains its rectitude by orderly

¹ Mad. Necker de Saussure, L. III., c. iv.

² This universality in thought is similar to the universality in benevolence. Sec. III. (nos. 232, 234, and foll.) We have shown this character of universality in benevolence to consist in keeping the heart open, placing no arbitrary limits to its affections, so that it may be ever ready to extend them to fresh persons, according to their merits. But, just as the heart which has confined itself within arbitrary limits, making certain persons the exclusive objects of its affection, shrinks at the sight of a stranger, as from an enemy, so does the mind which has entrencned itself within certain lines, beyond which it will not pass, shrink from a new idea. Arbitrary opinions and convictions, if they become strong, as generally happens, from some secret interested motive, form just that line of limitation by which the mind is confined, besieged, and compressed. A mind thus narrowed is hostile to every opinion, every doctrine, differing from its own; every new idea has the appearance of an enemy, and it fights against its admission, as dogs against the dog that has become a stranger. But what human being is wholly free from this propensity of the mind, this wrong mental disposition, this grudge against some portion of the truth? It would be hard to find one, and this because education, far from taking provident care to protect the child from so serious an evil, rather communicates it recklessly, as by contagion. What a new humanity would cover the earth, if this single rule of education came to be understood and universally practised!

and reasonable action, corresponding to the highest order of thoughts and affections. By making the child act irrationally or at haphazard, not to say wrongly, and letting him contract habits which have no foundation in nature or reason, we warp both his affections and thoughts; for disorder in the life is communicated to the heart and mind: these three things are bound up together in intimate communion.

It is, then, a great error to make the child a plaything for ourselves, instead of looking to his permanent good; to use him as a means, instead of respecting in him the dignity of the end. Yet how few parents are altogether free from this sin! Too often the idea that the child is their property is the first that enters their heads. Tribal laws contributed to strengthen this prejudice in men's minds, and Christianity has not yet succeeded in driving it out of their mental habit or their customs.

ARTICLE III.

ON MAINTAINING THE RECTITUDE OF THE CHILD'S CONSCIENCE.

366. From ignorance of the right way of commanding obedience, and from failure to direct aright the child's actions towards his own best good, his conscience soon begins to be warped. The duties of parents and teachers, in the formation of conscience within him, are amongst the gravest and most difficult to fulfil. Of these, then, we must now speak, and we will take up the argument again from the beginning.

To the smile on a human face the child responds by his earliest act of intelligence, which is, at the same time, an act of benevolence. This benevolence we have shown to have a moral character. Hence, we may see the admirable design of Providence in placing in the mother's heart that ineffable love by which man's intelligence and moral nature

are most fitly stimulated on his first entrance into this world. We may see also that the mother's tenderness, far from being injurious to the child, is that which speaks to him, inviting and drawing him on, from the first, to know another's intelligence and goodness, to which he must needs show love and reverence, in proportion as it shows itself good and loving to him.

But soon comes the danger that all his affections will be spent on a few objects, and, therefore, care should be taken, as we said before, that his heart be not closed against any kindly intelligence, and especially not to oppose to any such intelligence a feeling of malevolence.

367. The time comes, and it is that of the third order of cognitions, when the child learns, through language, that the beings who have been revealed to him from the first, in the light of goodness and lovableness, have also a will; and his first impulse is to conform himself to this, to live in it, without any thought of himself. This, again, is an eminently moral act. But we must observe here that this disposition to obey, to conform to the will of another, springs from the belief, which has grown up in him, that that will must be good, because the being who exercises it is good. his spontaneous obedience is readier in proportion as he loves and esteems the intelligent being he obeys, and his love and esteem are great in proportion to the goodness he perceives in this being. Now, if we consider the child's means of measuring the goodness of the intelligent beings with whom he comes in contact, we shall find that his judgment can rest only on such data as his age admits of. If a being corresponds with these data, he is just and righteous; for moral justice and rectitude must always be relative to the subject, that is, relative to the mode in which the object is perceived by the subject. The only data possible at that tender age are those supplied by that immediate communion of souls, of which we have spoken, between the infant and the persons around him, as taking place through smiles, kisses, caresses, sensible pleasures given him, services rendered to him. The more lovingly he is treated, the more of goodness does he perceive in the being that so treats him, and he rightly responds to it with love and obedience.

This explains, in the first place, why the child's obedience is not the same towards every one, being absolute towards certain persons and almost nil towards others: it also explains why he appears to feel keen remorse when he has disobeyed, say, his mother, and little or none in the case of others, and why his mother's will, and not that of others, becomes his abiding rule of action. This fact is noted by a mother, with her usual delicacy of observation.

"I have already said that an affectionate child believes himself generally to belong to one person. It is to this person he feels himself responsible for his actions; with others his relations are far less intimate. He sets himself right with other authorities as he can; but the reproaches of his true ruler go to his heart. That ruler is to him a conscience, by whose judgment, which he foresees, he is absolved or condemned. It is this one that his imagination pictures in the decisive moment of trial. Often the imagination is so vivid that disobedience becomes impossible; and, through the not unnatural effect of strong illusion, he even believes himself seen by that person, whose knowledge

¹ There is no doubt that the child has the perception of power in his mother, but of a beneficent and, therefore, rightful power,—a dominion. This idea of power is wholly different from the naked one of force; indeed, the idea of brute force remains for a long time inconceivable to the young child. Power includes, in his thought, goodness, because kindness, or, at least, beneficence, must come from power. The child, then, conceives in his mother this power of beneficence, an absolute power to which he loves to give himself up, to surrender himself utterly, thereby recognizing the legitimacy of the dominion she exercises over him. This is the true dominion, the highest moral authority. The child's ideas are always of more value than those of philosophers.

of what he has done at a distance is, therefore, no surprise to him. At that age, the idea of an invisible looker-on has nothing offensive in it.¹

But if, through forgetfulness or weakness, the child has yielded to temptation, when he finds himself again in the presence of his ruler, remorse enters into his heart. He might meet without emotion the owner of the fruit or flowers he has stolen; but he reddens with confusion, if he finds himself before the representative of his conscience. It is to this one he makes his confessions and enters into tender and touching explanations. It is towards this one that he feels the need of expiation, so natural to a guilty heart, conscious of serious wrong-doing; sometimes he will even punish himself.²

We may note by the way that this explains the apparent fluctuations of infant morality. Founded upon the affections, it must appear as mobile as they; but none the less it has a moral value and a stable principle, that of respecting and loving goodness in beings.

368. Let us go on to the duty of the educator towards the incipient conscience of the child. In the first place, we have shown that, if he can maintain a universal and regulated benevolence in the child's mind, this will prove an excellent rule of morality to give and maintain; and the child will quietly direct and restrain by it his affections and actions. As yet, however, there is in him no principle of moral conscience. He has reached the fourth order of cognitions

¹ Another reason for this is, that the human mind, before it has learned from experience the limitations of things, conceives everything, as we have observed, without limitation; the form of the mind being itself unlimited, and illimitable being that in which, and through which, it sees all things.

² Education Progressive, L. III., ch. vi.

³ On this account, I consider not only ill-usage, but whatever can alarm the child's imagination, very prejudicial to infant morality; for the imagination of fear makes the child conceive objects worse and more odious than even those which cause him pain.

and, having learned to know a positive will, he has judged and recognized it as his future rule of action, to which his physical gratifications must be postponed; but he is unable to judge that this will is good from its intrinsic reasonableness, and deems it good only because of his conviction that the being who exercises it is good. It is when the collision comes between the will of another and his own physical tendencies that, in the judgment of preference for the one or the other, in his temptation and fall, arises the first dawn of conscience in his soul, called up by the remorse which he feels, or, at least, has a presentiment of.

The duty of the educator relatively to the incipient conscience of the child consists, then, in always manifesting a will that is good in relation to him; for, that will being the child's rule of action, if it is good, the rule will be good; and he will esteem and love it, if, so far as his small means of knowledge extend, he can see it to be good and estimable.

We have thus to consider these two important points and to answer these two questions: (1) In what must consist the goodness of the educator's will, which is the moral rule of the child at the fourth order of cognitions? (2) How is it good relatively to him, that is, in such sort that the child can himself recognize its goodness and adopt it, of his own accord, as his rule of conduct?

Section 1. — In what Way the Will of the Educator, which is the Child's Supreme Law, should be good.

369. We have already stated that the child, when he first learns, by means of language, that his parents and teachers have a will worthy of his entire respect and affection, cannot judge of its goodness by any intrinsic reason, i. e., whether it is in its nature reasonable or unreasonable, just or unjust. But, although they need not fear in him a censor and a judge, they must respect an intelligent creature; they

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must keep watch for the conscience about to awaken in that infant human being,—a conscience which will not be true and conformed to nature, if we make the child believe evil to be good, thus falsifying by anticipation his moral judgments and teaching him to contract fatal habits.

SECTION 2.— The Will of the Educator, being the Child's Supreme Rule at that Age, should be good with a Goodness that the Child can recognize.

370. Assuming, then, that in the rule imposed on the child there is nothing dishonest, unjust, excessive, or violent, we have yet to find how the child himself can be made to recognize as good the will expressed by his parents.

Here, again, we must look only to those few means he has of knowing and judging it to be good, and not require him to use means which his understanding does not yet possess.

In the first place, then, it is not to be expected that he should understand the intrinsic reasonableness of the things required of him, which is altogether beyond him at that stage of development. We must fall back on the intrinsic data by which the child will judge, and these are the two following:

- 1. The child will judge the things which are required of him, and which are the general expression of the will of his mother or of his teachers to be good, if they are in accordance with his spontaneous impulses.
- 2. If the things required of him are indifferent, that is, neither in accordance with, nor opposed to, his spontaneous impulses, he will judge them good, because of the idea of a good, estimable, lovable being which he has naturally formed to himself of the being whose will is thus manifested to him.
- 3. If the things required of him by the being whose goodness he thus assumes should be repugnant to him, he is yet convinced that he should put them before his own

sensible satisfaction, and avoid, above all, things displeasing to the person he loves and esteems. Should these things be persistently and seriously painful to him, and the person imposing them give him no signs of love to feed his love and respect, they might end by destroying his first-formed belief in the goodness of that being; but it would be hard to destroy it entirely. If, however, these hard commands, opposed to his own will and feelings, come seldom, and, as it were, accidentally, there begins, in the fulness of his respect and love, that terrible struggle already mentioned, in which his virtue is either defeated, or, if victorious, issues from it all the stronger. Before his fall, however, he tries every means of avoiding the contest; to conciliate, if possible, his two needs, physical and moral; to bend, I mean, the will of his superior to his, striving to get a modification This desire to influence or withdrawal of the command. belongs to this period of childhood, and manifests itself at the fourth order of cognitions.

There is, clearly, no difficulty about requiring things that are either pleasant or indifferent to the child, and our only duty is to take care that they are reasonable and serviceable to him. The difficulty begins when we have to command things contrary to the child's inclinations and spontaneous impulses. With regard to these, it is the duty of the mother, nurse, or whoever has charge of the child, not only to be sure that the things are reasonable and of use to the child, but to choose, with the greatest care and prudence, amongst these useful and fitting things, those that are really necessary.

371. And, to begin with the child's desire to influence the will of those above him, it should not be needlessly opposed, but rather gratified and yielded to, whenever this can be done without detriment to him, that he may experience in this also the goodness which surrounds him. On the other hand,

he must be taught by firm opposition, when the occasion arises, that it is only from love, never from weakness, that he is indulged.¹

It need scarcely be said that it is sheer inhumanity to demand from the child what is excessively hard for him, and to treat him continually with a harshness which must destroy his natural conception of us as good. Ill usage of this kind, long continued, may harden his heart and incline it to gloom and cruelty, while closing it to love.

But will it be in our power to foster his incipient virtue? Yes, assuredly, as has been already shown (nos. 227 and foll.); but here the greatest care and thought will be needed, to measure the degrees of his temptation. The child must be required to pass the trial whenever needful; but even then care must be taken that the temptation be not beyond his strength. The greater his love and respect, the greater will be his power of resistance in the struggle, which is, in fact, a struggle between his respect and affection for the person he loves and some sensible gratification. The amount of the former, by which he subdues his desire, is the measure of the moral strength he can exert. What sagacity is needed to take this measure accurately! He may, indeed,

¹ Rousseau, who is always hard upon children, the secret of whose souls he never penetrated, says that the refusal of the parent should in every case be irrevocable; that the no once pronounced should be as a wall of bronze. I know no finer confutation of this excessive severity than the following, by a mother, -Mad. Guizot, in her Lettres de Famille sur l'Education, L. XXI. Such of my readers as have read, or may read it, will be able to judge for themselves; for those whom the book may not reach I will quote a passage: "Il n'y a pas une mère à qui je n'aie entendu reprocher sa faiblesse. Eh! oui, certainement nous sommes faibles, et c'est pour être faibles que le ciel nous fit mères. Il nous a voulu appropriées à l'enfant, ainsi que le vêtement qui le couvre, l'aliment qui le nourrit. Il nous a donné pour le comprendre un instinct, des organes qui ne peuvent servir qu'à nos communications avec lui ; une faculté de craindre, de souffrir, de pardonner ou de céder, sans rapport avec le reste de notre existence, avec l'ensemble de notre caractère, une faiblesse qui n'est que pour lui comme notre lait." The love and intelligence given by God to mothers is a fact of a special kind, worthy of profound meditation by the philosopher.

be helped in the conflict by caresses, by gifts, by sweetening as much as possible the pill he has to swallow, and all these means are legitimate at that age, when needful. I say 'when needful,' because, otherwise, it is better that he should be left to fight and conquer by himself. He is morally the better for it; his virtue is strengthened and his practical force healthily developed.

SECTION 3.—How the Child should be led upwards from the Knowledge of the Goodness proper to the human Will, to Knowledge of the Goodness proper to the Divine Will.

372. The most important means of keeping unwarped the dawning conscience of the child, without which we shall never succeed in keeping it pure, true, unfailing, consists in teaching him that in God also there exists a will, a will which is the highest, which is supreme over all other wills, and that to it we owe absolute obedience, and must conform to it in all things, even to suffering all things, and must subordinate to it every other will.

We must not require of him that he should conceive the divine will as wise, which is beyond his capacity; but he has no difficulty in conceiving it as the will of a Being supreme, absolute, and best, whose will must also be the highest, the most venerable, and, beyond all thought, the best. He is, indeed, as yet incapable of understanding the goodness of God's will from its effects; but he understands it through the conception he has formed of God, a conception natural to man, because it is natural to him to conceive the infinite and the absolute, before he can understand the words or use them to express his thought. It would, therefore, be a mistake to try and persuade him of these things by argument. It is enough to present to his mind the existence of a being, great and good beyond measure, whose will is also beyond measure powerful and good. Without any proof, he will immediately receive, and unhesitatingly assent, to what approves itself to him as essentially true, through an extremely brief process of reasoning, which his mind, impelled by the intimate laws of its nature, works out for itself, without, however, reflecting upon it afterwards, or being able to explain it or express it to others in words.¹

373. And the first of all means of communicating these great thoughts to children is through the natural and most efficacious channel of language, which they understand by that wonderful faculty of entering into the thoughts and feelings of others, which we call sympathy.

"We are told," says Mad. de Saussure, "that very pious

1 When a phenomenon repeats itself constantly, it indicates a law of nature on which it depends. The readiness with which children constantly receive and welcome an idea so exalted as that of God, and their implicit belief in His existence, are manifest proofs that this idea and belief find support in an inward law of the mind. I do not appeal here to philosophers, who speak of children without knowing them, but to intelligent mothers and observers, and to all who have had the care of children from their earliest infancy, all of whom will bear witness to the constant and most important fact of which I speak. "That which man conceives most easily is the unlimited, the infinite; that which he conceives late and with extreme difficulty, and, perhaps, never conceives completely, are the limitations of things." Those acquainted with our theory of the unlimited form of being through which man attains all his knowledge, will see not only the fact, but the reason of the fact. Leaving the reason aside, however, for a moment, it will be useful to compare what takes place in the child with what takes place in primitive races. The phenomena manifested in the infancy of races are a reproduction and a confirmation of those manifested in the infancy of the individual. In finding them thus repeated, we are assured that we were not mistaken in our observation of them. Now, if we analyze the immense inclination to idolatry manifested in the early ages of all peoples, we shall see that such a fact comes under the psychological law of man's inclination to see everywhere the unbounded, the infinite, and his immense difficulty in seeing and noting the limitations of things. This will be better understood by recalling what we have said on perception, as at first imperfect, and afterwards successively perfected (nos. 104-120). The mind, at first, does not attend to all that is contained in a sensation, but is satisfied with learning from it that a being subsists, and goes no further, leaving the determinations of the being undeveloped in the sense. There remains, therefore, in the judgment of the understanding, a being subsistent but indeterminate and vague, without any horizon, as it were. At this stage, however, the mind does not yet pronounce that it is unlimited; it affirms nothing about its limits, whether it has any or none; but it easily inclines in this state to judge that the thing is infinite; it is enough that it should be moved to such a judgment by a strong feeling, a vehement affection, a deep passion or an exalted sense of wonder. In such cases, not only is the entity felt, but a judgment is added concerning its greatness. This greatness declares it infinite, simply because its limits are so reteachers are successful in teaching abstract dogmas; but may not their success be the result of their piety rather than of their method? They influence by the feeling which inspires them; they transmit, unconsciously, their own fervor. It frequently happens that convictions are communicated by means which were least thought of. This power of sympathy, this readiness of one flame to kindle another in the child's mind, shows what power women can exert, and wonderfully exalts their position. On them depends the religion of future generations. . . . "When that which is sacred to the mother," says Jean Paul Richter, "is addressed to that

mote that the attention cannot reach them. Thus, the human mind is less apt to observe the limits of things, in proportion to the remoteness of the limits, in proportion to the greatness of the thing, especially if it seems great to passion, which delights in the greatness of its object, and wishes to find it without limitations of any kind. We have, then, two psychological causes of idolatry: the first, ideological, founded on man's facility in thinking the unlimited, and his difficulty in thinking limitations; the second, moral, founded on his feeling of the greatness of things, and his passion, which desires them to be unlimited. In proportion to its development, the human understanding becomes more and more apt to observe and determine with accuracy the limitations of things, and thus finds it more and more difficult to divinize the things themselves. Yet, it never loses altogether its primitive tendency towards the unlimited, and, therefore, it retains the desire to create for itself an illusion, which can never be complete, but which can never fail, altogether; for, if the mind could not produce some illusion by its effects, it would cease making them. It seeks, therefore, still to deceive itself, but with its eyes open, so that it cannot altogether succeed. I will give an example. Cicero declares unequivocally his conviction that the gods honored in Rome were not real gods, but men, to whom divine honors were paid. His primitive illusion had, therefore, been dispelled by the progress of his reason. But his daughter dies; and Nature, re-awakening within him, makes him try to deify his lost Tulliola, and weave for himself some illusion, which shall console him in spite of his reason. The words preserved for us by Lactantius, with which the great orator sought to justify this attempt, are as follows: "Cum vero et mares et fæminas complures ex hominibus in Deorum numero esse videamus, et eorum in urbibus atque agris augustissima delubra veneremur, assentiamur eorum sapientiæ, quorum ingeniis et inventis omnem vitam legibus et institutis excultam constitutamque habemus, Quod si nullum unquam animal consecrandum fuit (here is the expression of his doubt) illo profecto fuit. Si Cadmi progenies, aut Amphitryonis, aut Tyndari in cælum tollenda fama fuit, huic idem honos certe dicandus est. Quod quidem faciam, teque omnium optimam, doctissimamque, adprobantibus Diis immortalibus ipsis, in corum cœtu locatam ad opinionem omnium mortalium consecrabo." These words are taken from the book which Cicero wrote to console himself for the death of his daughter. See Lactant., Instit., I. 15.

which is sacred in the child, their two souls understand and answer each other." 1

These feelings, transmitted by the intimate communion of souls, must, however, be clothed in fitting words. Nor must we neglect to show forth the divine goodness and greatness in their effects, — not by argument, but only by affirming that all things come from God, that He is the fountain of all good to all men.¹ Hence, thanksgiving is the most

1 It is the great error of a false philosophy, which has taken root principally in Germany, to insist on giving religious instruction entirely through argumentative reasoning and demonstrations. This false method arises from ignorance of the nature of human intelligence and its modes of action. The child, it is said, must exert its intelligence: so far, we are agreed; but I would suggest that the difficulty would be in making the child act without exerting his intelligence; for, his nature being intelligent, he must act in accordance with his nature. But, instead of letting the child's intelligence follow its natural path of advance, an attempt is made to guide it by artificial methods into paths that are not its own, and it is declared not to be intelligent, unless it abandons the laws of its nature and submits to those arbitrarily imposed by the presumptuous and tyrannical ignorance of the philosopher. The latter believes that he alone reasons. He sees in the child no other light of reason than that which he will impart to him, on condition of his ceasing to be the pupil of nature. But the sagacious observer, unlike the pedants of whom we speak, arrives at the conviction that intelligent nature has secret methods of its own, independent of the arguments of human philosophies, and that the child gets lost and confused, instead of enlightened, when, instead of following these natural methods, those intimate processes of reasoning which carry him, by a secret road, straight and surely to the truth, he is forced to adopt the uncertain and often fallacious arguments of the adult, as if they were the sole guarantees of authenticity. Let those who, against the higher feeling of antiquity, would reason out even the catechism, that is, fill it with human and scholastic arguments, ponder on these facts. The evil began with German philosophy, but has now spread to France, as may be seen from the poor catechism which is printed in Paris. I hope that the good sense of the Italians will preserve them from being deceived by the speciousness of a method so opposed to the intimate laws of the human intellect. Let me conclude with the noble observations on this subject of a Protestant lady: "I have already declared myself against the use of proof. I would banish it, not only as hurtful to feeling, if it exists, but as delaying its appearance, if it does not exist. I have yet another motive. Every proof presupposes a doubt, and it is often easier to excite the latter than to dispel it. If the truth we want to establish were self-evident, no one would take the trouble of demonstrating it: to justify the use of a demonstration, we must bring forward the contrary propositions. We have here, then, a double lesson, one of error, in order to confute it, and one of truth, to stamp it on the mind; but the first is, to say the least, unnecessary, and too often leaves its traces behind." - MAD. NECKER DE SAUSSURE, L. III., c. viii.

fitting act of worship at that age, and children should be led to perform it as often as possible. There is beauty in the short prayer which Mrs. Hamilton proposes to suggest to a child, whenever he receives a kindness: "My God, I thank thee for having made such an one so good to me!"

By exercises like these, the child's mind is led to more and more knowledge of the first cause of all, the universal fountain of good; led to distinguish it from secondary causes, and to prefer it to all human beings, however good they may appear, and, moreover, to enter into direct communication with it. When this most perfect being is brought so near to the child, and becomes known to him, as the origin of all good, we need no longer fear lest the will of man should take a higher place in his heart than the will of God: the latter becomes the supreme rule, the former the subordinate one. This is what most concerns us, in order that conscience be not warped in its formation: this is the aim, the first endeavor, of parents who are truly Christian, and who desire to educate for God the beloved pledges entrusted to them by God.

SECTION VI.

THE COGNITIONS OF THE FIFTH ORDER, AND THE EDUCATION CORRESPONDING TO THEM.

CHAPTER I.

THE DEVELOPMENT OF INTELLIGENCE WHICH TAKES PLACE IN THE FIFTH ORDER.

374. The classification of the cognitions belonging to the fifth order will be easily made, if we attend to the principle, that the cognitions of a given order consist in the relations which the mind discovers, through reflection, between the cognitions of the orders below it, and by observing the same method of classification as in the preceding orders (nos. 253, 301).

In addition to this, before entering on the discussion of a given order of cognitions, it will be well to bear in mind that the cognitions of a given order are not all formed with equal care or at the same age; those only being formed to which the mind directs its attention, and its attention being aroused and directed only by the stimulus of wants, some of which make themselves constantly felt at a certain age, while others are felt sooner or later, according to accidental circumstances.

Finally, it must be remembered that, as we have already said, the mind, while working on a given order of cognitions, is not idle as regards cognitions of inferior orders, but goes on developing these in proportion to the pressure of new wants and in correspondence with them.

We will now go on and point out some indications of the development which the mind attains of itself, through the fifth order of cognitions, which is generally sufficiently marked in the child's fourth year.

· ARTICLE I.

PROCESSES BY WHICH COGNITIONS OF THE FIFTH ORDER ARE FORMED.

SECTION 1. - Synthetic Judgment of the Third Species.

375. The mental operation proper to the fifth order is synthesis of the third species.

The first species consists in perception (first order), the second in *predicating the qualities of things* (third order): of what then does the third species consist?

This is prepared by the preceding analysis. The analysis of the fourth order we have seen to consist in the decomposition of elements (no. 302), by which the mind discovers that a subject is the result of two elements,—the one, a thing of which something is predicated; the other, a thing which is predicated.

In grasping these two elements, as constituent parts of one and the same thing, the mind has already begun to compare them, and, therefore, we have said that the process of comparison begins in the human mind with the analysis proper to the fourth order; but, on closer reflection, we find that such comparison is rather virtually than actually comprised in the analysis. Let us explain: the process by which the mind notes two things in the one subject present to it, say the substance and the accident, does not actually consist in the express comparison of the one with the other, but in the implicit perception that the substance is not the accident, or the accident the substance, although both are known to belong to a simple object. Now, the perception that the substance is not the accident does implicitly contain the comparison which reveals the relation of difference and opposition between these two parts; but such a comparison is not yet the process by which substance and accident are decomposed and distinguished, though the latter is implied and supposed by it.

Here we must note with the greatest care an important fact in the human mind, i. e., the double character of its processes.

Sometimes these processes are carried on by the mind expressly and explicitly, and then they are easy to observe: they constitute the specific form of its activity, which terminates in that form, and is, so to speak, shaped by it. At other times, the mind carries on the same processes in the most cursory manner, not looking for any term or rest in them, but solely using them as steps or means to other processes, which it makes its end. The latter it marks with care, because it wants them for themselves; but it passes rapidly over the others, which it wants only as means to its end.

Hence, when there is comparison in the elementary decomposition of a subject, the mind makes it rapidly, imperfectly, and only in so far as it is a necessary step to the knowledge that there are two parts, two elements, constituting the subject, and not one alone. For this knowledge it is sufficient to perceive that the one element is not the other, without going on to determine what are the differences between them; and, although the perception of a relation is involved in knowing that the one element is not the other, i. e., a relation of diversity, yet the mind does not see this relation abstractly and in itself: it sees the two parts, but does not dwell on their duality, as such. Having premised this, we shall be able to understand in what the synthesis of the third species consists, which is the operation proper to the mind in the fifth order of cognitions.

376. The analysis of the fourth order having verified the existence of two different things which combine into one, the synthesis which takes place in the fifth order follows, to discover the relations between these two elements. Synthe-

sis of the third species consists, therefore, in determining the relations between two things which combine into one.

From this definition it will be seen that, in such a synthesis, the process of comparison appears in express and distinct form, not cursorily and accidentally, as in the previous analysis; that, moreover, the relation, which is the result of the comparison, is also seen in a determinate form, and not in a general and imperfect one, as before.

Not only are subject and predicate bound together by relations, but the latter may be found between any two things which present themselves together, and between which there is some connection making the mind regard them as a unity, a complete object of thought.

With respect to subjects and predicates, the mind can discover what the law is which unites them in one object, whether accident, or necessity, or the essential nature of the thing; so that the distinction between them is one of conception, not of actual truth.

If there are two objects, they may be viewed together in a complex thought, through the relation of similarity or difference,2 of cause and effect, or any other that may be chosen.

¹ For the distinction between comparison and the relations discovered by comparison, see Il Rinnovamento, etc., L. II., c. xxx.

² It will be said that to discover differences is to perform an analysis, not a synthesis. I answer that even the process of differentiation varies with the order of cognition at which the mind performing it has arrived. In the fourth order, to differentiate is to analyze, as we have seen (nos. 307, 308); but, in the fifth order, this same differentiation becomes a synthesis. The reason of this is that, in the fourth order, the differences are taken into account, but not the objects in which they appear; in the fifth order, the objects are taken into account and the differences are considered as a relation which connects them mentally, combining them into one complex thought. According to the first method of differentiation, the seven colors remain distinct things. On the other hand, if I think of color in general, and then set myself to examine what modifications are to be distinguished in it, the seven colors become the principal modifications of color in general, forming a unity, and their very differences serve to determine the relation which exists between each of them and color in general.

SECTION 2. - Analytical Judgments belonging to the Fifth Order of Cognitions.

377. The analytical judgments formed by the human mind at the fifth order of cognitions are of the second, and also of the first, species.

The materials for this analysis are prepared by the preceding synthesis, i. e., that of the fourth order or before it. This will be easily understood, if we remember that, in each order, besides the processes peculiar to it, other processes go on, which, from their nature, belong to preceding orders, but which, from special circumstances, have been deferred till now.

For example: to predicate something of another thing is the synthetic process which belongs to the third order, in which such synthesis first appears. But it is evident that the mind, in the third order, can predicate one thing of another only on condition that it has: (1) the concept of the thing predicated; (2) the concept of the thing of which it is predicated. Hence this process must remain unperformed in the third order, whenever the human mind, having reached that stage, has failed to conceive either the predicate or the subject. This would be the case in predicating action of an agent.

We have seen that the abstraction of actions does not take place before the third order, or, rather, cannot take place sooner. Thus, all judgments and intellectual processes concerned with actions and agents are delayed one stage, and, while, in the third order, actions are considered in the abstract, it is only in the fourth that the synthesis by which they are predicated of a subject agent can take place (nos. 304, 305), and, finally, only in the fifth can the agent be analyzed, that is, divided from his act, and agent and act considered as parts or elements of one subject, which is the elementary analysis proper to the fourth order, but which is accidentally protracted and deferred by the mind till the fifth.

378. Now, this analysis of the second species, but belonging to the fifth order, is an operation of infinite importance, to both the intellectual and moral progress of the child.

The attribution of an act to a subject is as yet only the recognition of a fact in itself of no consequence. Such a synthesis appears to me nothing more than placing action in an entity. But if, after uniting the action and the subject, and thus forming them into one whole, the agent, I again consider the agent, and distinguish the action and the subject in him, as two elements of one whole, I open the way to discover their relation, every relation between that action and that subject. I need but one step more to enable me to arrive at a most important truth in the domain of morality, i. e., that the value of the action belongs to the agent, and, therefore, that I am bound to esteem the agent in proportion to the worth of his action. This step will be taken in the next order, the sixth, in which will begin, in the child's mind, the distinct idea of the imputability of actions, and the way to the formation of this great idea is prepared in the fifth order.

SECTION 3. - Disjunctive Ratiocination.

379. We may attribute to the fifth order the process of the disjunctive syllogism, or, at least, the formation of its major premise.

This major premise may be reduced to the following formula: Of the two only ways in which a thing can be (whether as done or happening), it must be done or happen in one or the other. Now, to conceive this proposition, it is necessary, first, to have the complex idea of the two ways in which a thing can be, or be done, or happen, and, moreover, to have observed the relation of opposition between them, — that the one excludes the other. But we have

¹ We are speaking here of modes of being, not of being itself. There is, indeed, a disjunctive proposition with respect to being, at which the mind, possibly, arrives

seen that it is only at the fifth order that the human mind comes to distinguish two things in a single concept, and to note the relation between them, through synthesis of the third species. Hence it appears that, previous to the fifth order, the human understanding is incapable of conceiving the major premise of the syllogism termed disjunctive.

380. The necessity by which a thing can exist only in one of two ways is sometimes metaphysical, sometimes physical, sometimes merely positive, or optionally physical. That a thing must be or not be, is an alternative of physical necessity, and the same holds good of all propositions of which the two parts are formed by the affirmative and negative (principle of contradiction). If I take one ball out of a bag wherein I had previously placed two, there is physical necessity that it should be one of these two. That the child must be rewarded or punished for a given action, is an optional physical necessity,—physical, that is, but conditioned by the will of the teacher, who promised the reward or threatened the punishment.

The child has within him the cognition of physical necessity and could never act against the principle of contradiction; but he can neither express it thus early, nor analyze it, nor understand it, if placed before him as a distinct proposition.

The necessity of the voluntarily physical alternative is the earliest to be explicitly understood by him; then comes the physical, and, lastly, the metaphysical. He must be purposely led through these gradations of disjunctive propositions. Propositions of this kind, containing more than two parts, belong to the subsequent orders.

earlier, i. e., This thing (or anything) must be or not be; but, although the human mind could never act against the truth of that proposition, yet I do not believe it capable of explicitly pronouncing it, or of understanding it, on hearing it pronounced, except through the series of syntheses and analyses which we have described.

ARTICLE II.

ORJECTS OF THE COGNITIONS OF THE FIFTH ORDER.

SECTION 1. - The Real and the Ideal.

A. - Numbers.

381. The child, having arrived at this order, can acquire a distinct idea of the number four.

In saying that the child can acquire a distinct idea of this number, I mean that he can learn to know all the relations between the number four and the preceding numbers; and the arithmetic suited to this age consists in the study of these relations. He can, moreover, clear up the somewhat confused notions he already has of higher numbers; for, being in possession of the number four, he has a new means of attaining them, by adding successively a predicate to four. What I have already said of the number three in the preceding order (no. 308) seems to me sufficient to explain all that can be required of the child in arithmetic at this stage, and in each of the subsequent ones.

B .- Order of Value between Objects.

382. Our pupil has already begun to form groups of things for himself (no. 309), and he goes on with the formation of such groups in the fifth order. Those consisting of three objects are already easy to him, and he can conceive them distinctly. With regard, however, to his further progress in forming these groups, we leave it to the reader to accompany the child's steps through this and the following orders, contenting ourselves with having marked the age at which this work of grouping begins, and the law by which it proceeds. We will note, instead, a new and important operation, which the child enters upon at this age, *i. e.*, the distribution of things in a certain order according to their value, real or supposed, absolute or relative.

He has already, in the fourth order, begun to note mentally

the differences (307). At first, indeed, he attends only to numerical or total differences, taking no heed of any others. These can scarcely be called differences. But he soon begins to note others, which become the basis of the various groups he proceeds to form. For the formation of one group only he does not require the knowledge of differences: but he must have it to form two. Following, then, on the period of grouping and the period of differences, comes the period of order between several groups, or between the individuals which compose each of them. To place one thing or one group before another, not only he must know in what they differ in general, but he must further reflect that it is this difference which causes the one to be preferred before the other, to have more value than the other. ence, as a mere fact, begins to be distinctly recognized at the fourth order of cognitions; the consequence drawn from it, to the advantage of the one and the disadvantage of the other of two different things, does not follow before the fifth order.

C. - Time.

383. At the fifth order of cognitions, the child is able to distinguish the three modes of time, *i. e.*, to observe past events and distinguish them from the present, and the present from the future. This results from what we have already said regarding the progress of the infant mind in noting time in things (nos. 316-318).

When the child has compared and distinguished a present from a past event, and has likewise compared the present event from one he foresees or imagines in the future, he is in a position to compare the past with the coming event, and thus to conceive the same event under the three forms of time.

At this age he also begins to form to himself, — always by means of words, — an idea of time, abstracted from events. The abstraction of past, present, and future is based on the events he has conceived under two forms of time in the preceding period.

At first, however, the child does not conceive the past in itself, but only as determined by some marked event: such as a meal that is over, or the past of yesterday, divided by the setting of the sun or by sleep from to-day. These are the earliest determinate parts he learns to know. Hence, not only should time be spoken of to the child in accordance with these gradations, but it should always be connected with events that make a marked impression on his mind and leave a lasting trace, as of so many epochs by the help of which he can fix his thought on what went before and what after them, and thus observe time in its various forms.

D. - Of the L.

384. I have already shown that the child cannot understand the full significance of the monosyllable I until he has arrived, at least, at the fifth stage of his intellectual development (nos. 311 and foll.)

In the first he perceives only external objects. Let us suppose that in the second he perceives actions. In that case, it will be only in the third, certainly not earlier, that he will attribute them to an agent; but he will not yet recognize that agent as himself, because he has not yet found himself amongst agents. At this point he can speak of himself only in the third person; and this we have seen to be the case with children before they have mastered the meaning of the monosyllable *I*, and also with adults, if their intellectual development has been arrested at a certain stage by special circumstances.

Not till he has reached the fourth order, in which the understanding begins to note distinctly the differences of things, will he be able, under the stimulus of language,

which his own wants and a natural tendency help him to understand, to distinguish himself from other agents: in other words, be led to perceive intellectually his own fundamental feeling, the man-feeling within, as the author of these This is, indeed, a simple perception, and, as such, would belong to the first order of cognitions; but, as we have seen, it does not take place at that time, because the want which impels to it is not yet felt. This want manifests itself now, in the necessity felt of attributing actions to an author. and, therefore, of attributing to that fundamental feeling, experienced by the human being, certain actions which, for that reason, he calls his own. The man cannot attribute these actions to the fundamental feeling he experiences, unless he has first perceived this feeling intellectually. Henceforward he is moved to reflect upon himself, i. e., upon that fundamental feeling which constitutes his self.

Thus, not till he has reached the fourth order, or, even later, does man begin to understand the monosyllable *I*, as signifying that substantial feeling which he has and perceives as the author of actions.

But even this, as already said, is not the full meaning of the monosyllable I.

This monosyllable expresses, in addition, the identity between him who knows and pronounces the I and the acting fundamental feeling expressing who it is that pronounces the I. It is evident that this identity cannot be understood until the fundamental acting feeling has been intellectually perceived, and, therefore, not before the fifth order.

385. Nor does this suffice: at the fifth order man takes another step in the knowledge of himself. Having already, in the fourth order, arrived at the perception of the fundamental feeling, by attributing actions to it, and having also conceived actions in two forms of time, the past and the present, or even the present and the future, he now, in the

fifth order, comes to observe that the acting principle felt and perceived is the same at both times, while the actions of this principle in the past and present are different. The *identity* of the *I* amidst varying actions and times is the new cognition which now appears, and which, gradually becoming firmer through continual experiences, increases indefinitely the knowledge of self. It is true that this identity is not expressly and distinctly conceived and affirmed; but it is implicitly felt and conceived, so that, from this time, man does nothing which involves a denial of it, nor ever acts in contradiction to it.

SECTION 2. — Morality, Moral Principles. A. — Beginnings of Remorse and of Conscience.

386. The moral principle which has lighted the child's mind up to this point, as the guiding star of his individual activity, has been respect for nature and for the intelligent will made known to him.

This principle, become operative within him, has taken four forms, i. e., (1) benevolence; (2) assent; (3) belief; (4) obedience. In fact, the child naturally feels love, adopts the sentiments of those he lives with, trusts their word, and obeys their will. Instinct, undoubtedly, helps him in all this; for the inclination to love, to sympathy, the tendency to receive what he is told, without any effort at contradiction, the spontaneous activity which allows itself to be swayed without resistance, are powerful helps towards the accomplishment of his moral duty, and God provides that, through them, duty shall be made easy and pleasant to a being too weak as yet to bear a struggle. But these instincts and others, whether animal or human, do not constitute morality, which depends, as we have said, on that intellectual light by which the human being sees the nobleness and grandeur of the intelligence and will revealing themselves to him as benevolent.

Already, at the fourth order of cognitions, he feels and understands that he ought to feel, such esteem and affection for the intelligent will manifested to him that he unhesitatingly believes himself bound to submit to it all his own sensual instincts; and if he yields to the latter he already blushes with shame, hides himself, and is tormented with remorse.

It is most important to observe this feeling of remorse which marks the child's entrance into the fifth order of cognitions. In the fourth he has understood that he is bound to conform himself, no matter at what cost, to the intelligent will manifested to him. When, later on, he infringes in action this well-known moral rule, and feels remorse at having done so, he has taken a step onwards and has reached the fifth order.

But the remorse then felt is not altogether the same as that which will come in the sixth and other orders. We must here take careful note of this difference; for it will help us to establish the rules or moral principles formed in the mind at the fifth order of cognitions.

387. There can be no remorse 1 previous to the conception of the positive will of another intelligent being; for before that the child can know no moral struggle. His action, which is entirely spontaneous, meets with no moral obstacles. Hence, his remorse marks for us his entrance into the fifth order of cognitions. But the remorse thus manifested differs from what comes later, in not requiring for its display a clear notion of the imputability of actions, whereas, at a later stage, remorse is actually the effect of the child's imputing expressly to himself, by his inward judgment, the bad action he has committed. In fact, as we have seen (nos. 384 and foll.), the child at the fifth order has not yet attained to a

¹ Refer on this point to the *Treatise on the Conscience*, B. I., c. 2, a. 3, § 3; B. II., c. 1.

completely clear conception of himself; for, although he has come to know that some actions belong to that substantial feeling of which he is conscious, he does not yet know either where to find, or where to place, that feeling; which is as much as to say that he does not yet recognize that that in him which judges, speaks, imputes, is, in fact, that feeling imputing to itself those bad actions. Moreover, in the fifth order, he is only generally conscious of the relation between the acts done and himself who has done them; he cannot yet recognize this quality, which belongs to the following order; hence to this order belongs imputation, properly so called (no. 378).

If these elements, which enter as causes and integral parts, into the remorse observed in adults who have sinned, are wanting in that of the child at the fifth order of cognition, what is the remorse he feels? Does it deserve the name of remorse, and can it have the same meaning as when applied to remorse fully developed?

The human being, before he has arrived at the full consciousness of himself, is sufficiently aware of the existence of other beings to feel that they have a certain moral claim upon him. This claim is the moral obligation, which is immediately manifested in all its binding force to the intelligent mind, before it takes the form of law. Now, if the child feels that moral claim, even before he can reflect upon himself, he must, as a consequence, feel a corresponding shock and pain whenever he acts in opposition to it. This is a beginning of moral sentiment, which is aroused within him in the same manner as the sense of the claims of other beings, and is independent of any express judgment of imputation by which he judges and condemns himself as guilty. Between the action which he conceives and commits, and the

¹ I have shown the distinction between law and obligation (vis obligandi) in the Treatise on the Conscience, B. II., c. i. a. ii.; B. III., Sect. II., c. iv. a. vi. § 5.

things whose claim upon him he feels, — say the respect due to their intelligence and will, — arises a discord of fact: a struggle begins in his soul, in the substantial feeling within him, which, being all feeling, is dismayed at this contest. This is the remorse which arises in the soul as a necessary, not a voluntary, phenomenon, a feeling similar to the pain from a wound; for the soul, and even the moral element of the soul, has its physical laws, as unchangeable as those of bodies, and it is a mistake to believe that all that happens in the sphere of morality depends wholly upon the will, or is as impalpable as an idea, or as vague and fugitive as accidental affections.

The mind, in its moral being, may, then, receive wounds and suffer pain from them, before it knows itself or has reflected on its own personality; and this is the remorse which belongs to the fifth order of cognitions.

388. Remorse of this kind belongs to the moral sense and not properly to moral conscience; but, when man arrives at a higher stage of intellectual development, he immediately, if he goes wrong, suffers a remorse which is the result of his consciousness of wrong-doing.

Not that this primitive remorse is formed without the help of the intellect, — certainly not; but the intellect does not produce it directly; it does not condemn by an express judgment, the fear of which causes the inward pain called remorse: the intellect only recognizes the wrong that is being done, so that the feeling of the being thus knowing it to be wrong is shocked when about to do it under the pressure of temptation.

The remorse belonging to the sixth order, on the contrary, acquires a new element, that of imputation. Man has thus learned to know the *I* as a substantial feeling, acting, knowing, judging, and uttering itself. He not only attributes to this *I*, as to their author, the actions he has already recog-

nized, as bad, but he imputes them, in other words, he understands that the *I*, author of these guilty actions, is deteriorated by them, and hence comes the sense of demerit and blame. The man who, in this state, judges and condemns himself, lies under the weight of this sentence, as under a new evil; and a new bitterness is added to his remorse, which thus becomes the offspring of his moral conscience. By the act of imputation, remorse is enlarged, integrated, and acquires a new element; it is no longer a moral sensation, but has become a real reproach or moral blame.

It is true that, when this other remorse, appearing as reproach and remonstrance from an internal and superior judge, is added to the immediate and actual remorse, it does not change the latter, but combines with it, to sting the heart of the sinner with a double pang. The earlier feeling prepares the way for the later. The touch of this natural sting often awakens reason to perceive and recognize the wrong and to place it before the mind, in such guise that the man becomes conscious of, and blames himself for, his wrongdoing; he is led to seek the cause of the uneasiness and suffering of his moral nature, and finds it in his wrong action.

We may, then, rightly call both these intermingled pains remorse, and the later form of it may be considered the complement, or almost a new form, of the earlier. If they are to be divided, the first might be termed remorse of natural piety, because it springs from the violation of the moral principles within us, and the second remorse of conscience, because it springs from the judgment by which we impute to ourselves the bad action committed: the first is a real relation (a discord) between the I, as an acting feeling, and the recognized claims of other beings; the second is a real relation between the I, as an acting feeling, and the sentence of condemnation

pronounced by it on itself. Although, in the first, there is yet no moral conscience, there is something in it which stimulates and excites the conscience, so that it may be called the dawn of conscience.

Hence we may conclude that the great moral maxim, "Follow conscience," is not yet formed in man at the fifth order of cognitions. What, then, are the moral principles of that order? What is the new form taken by morality in the mind of man at that stage? These are the questions we have to answer.

B .- Moral Principles in the Fifth Order. - Duty of Moral Fortitude.

389. The remorse manifested at this period, although imperfect, produces the moral instinct which bids us fly from evil and do good. This follows so soon as remorse can be foreseen, or felt in anticipation of the action. Such an instinct is not yet, however, a true moral formula: it only leads quickly to a maxim, expressing rather a dictum of prudence than a moral obligation. Now it is the formulæ, the moral principles of this period, that we are in search of.

To discover them, we must return to the order of moral development, and recall how morality made its appearance in the fourth order.

We saw it manifest itself at that time, as a duty to conform to the will of known intelligent beings, at whatever cost (no. 328). This principle contained a kind of collision between eudæmonological good and moral good, between subjective and objective good, involving the moral necessity of sacrificing the latter to the former. But it must be noted that, at this period, the subjective good cannot be objectively perceived, man not having yet the consciousness of himself. It was, thus, the subject man, as moral subject, who, on the one hand, feeling pain and

pleasure, and, on the other, seeing duty, paid no heed to the former, but decided simply that here was duty and that it was all. The identity of the sensitive and intelligent subject can alone explain how this subject could dedicate and consecrate itself to what was thus prescribed by the intellect passing beyond the sense without considering it, without judging or comparing it, as if it had no existence. The necessity of obeying the command to do right is absolute, and, therefore, the man decides on that side, without even hearing a plea to the contrary: sense suffers and cries out against its pain; but the intelligent I stops its ears, bent solely on what duty demands. In this way, and not as the result of any process of comparison, is the will of the intelligent being, when seen as duty, placed above all other things in the morality proper to the fourth order of cognitions.

390. In the fifth begin those collisions between duties which change the form of the earlier moral theory. I say 'collisions between duties,' not between that which is duty and that which is not duty, but pleasure. This species of collision does not, strictly speaking, change the moral theory, though it influences practical morality; for, as soon as the human being attends to the call of sense, refusing to be sacrificed to duty, he enters into a new moral condition; he is assailed by a new temptation, and requires new fortitude. The observation and attention which is given by the intelligence to the pain entailed by the fulfilment of duty adds a side precept, if I may so express it, to morality, which takes this form: Be strong against temptations. This does not concern itself with the form of the final duty, but rather presupposes it; for, in the words "Be strong against temptations," the duty in the fulfilment of which we must be strong is not expressed, but implicitly admitted. Nevertheless, it will be well to assign to the fifth order this precept which commands moral fortitude. Having touched on this by the way, we return to our statement, that, at the fifth order, we have the first appearance of a certain collision between duties; and it is this collision which changes the formulæ of moral obligation.

C .- Duty of Honoring in Preference the Will of the Most Worthy before All Others.

391. The rule of the fourth order was that the will of the intelligent being should be respected; but, when the wills of several intelligences make themselves known which are not all in agreement, there arises a collision of duties, and the question, Which of these is to be preferred?—this is the moral problem which the child has to solve at the fifth order. Some solution he is constrained to find for himself, by the moral necessity of action, and this solution becomes to him a new moral principle, a new formula expressing his obligation.

Before we examine how he should solve this difficult question, let us see why it presents itself to him at this period and not earlier.

In the first place, he must by this time have come in contact with several persons; and it is impossible that they should all have been perfectly agreed, and all have been exactly alike in their kindness, their teaching, their authority, in dealing with him. Moreover, he has already learned that there is a Supreme Being, and a supreme will excellent and perfect above all, and he has come to distinguish, after some fashion, between this most excellent will and that of others whose goodness is limited. In the second place, he not only began, in the fifth order, to distinguish the differences of things, but to place them in a sort of order of value as between themselves, at any rate, as between any two (no. 381).

This order between the things contemplated did not exist for him at an earlier period, and, therefore, he was unable to assign their relative places to the intelligent wills which claimed his respect, and could give a preference to one over the others only by a spontaneous and instinctive impulse, apart from any reason for it. But at the fifth order he is capable of a rational preference. How will he exercise it?

There can be no doubt that he will deem that will to be preferred as worthiest which is the kindest, the most beneficent. It was the intrinsic goodness and dignity of the intelligence which first revealed to the child how essentially lovable and venerable is the intelligent will. It is evident that the different degrees in which intelligent goodness manifests itself to him will determine and prescribe the degrees of his love and respect. This rule of the degrees of goodness conferring their relative worth on the wills of intelligent beings is complete, absolute, and immutable. Goodness includes intelligence, for intelligence is the condition and beginning of goodness; it is good of a supremely noble kind of goodness; it includes wisdom, and, above all, it includes voluntary goodness.

But the application of the rule must vary; for there is variety in the means possessed by the child for measuring goodness and its degrees. He is liable to error in judging the degree of goodness and worth in wills opposed to his and requiring his submission; but his judgment, though wrong in itself, may be right in regard to him. It is always right when he takes into consideration all the degrees of goodness known to him: in one word, what he must measure is not the whole goodness of intelligent wills, but all that portion of it which is communicated and made manifest to him.

392. It is, however, very possible that the judgment he pronounces at that age will be partial and unjust, and for this reason: When the child first bows before an intelligence which he perceives as external to himself, he performs a

right act. His mind, as yet quite neutral, would easily move with equal inclination towards any other intelligence that might have revealed itself to him. But he very soon attaches himself to the persons who are habitually about him, and whose tenderness supplies his wants, and this affection may become partial and exclusive, as we have seen (nos. 239) A simple physical affection is certainly not in itself wrong; but it may move the understanding to a false judgment, and, in that case, there is moral wrong, because the intellect obeys and assents, not to what is true, which alone has a rightful claim over it, but to the suggestions of the will which corrupt it. If, then, the child's affection has become exclusive and narrow from the first; if these limits to natural benevolence have degenerated into jealousy, envy, ill-will, or other evil feelings; if these are not mere sensations, but real volitions, the fatal poison of sin has secretly entered the child's soul, and his understanding become a corrupt judge, his soul the seat of falsehood only. By these occult operations, the saddening depravity of the boy, the reckless corruption of the youth, the crimes of the adult, who is his own worst enemy, as well as that of society, are prepared in infancy.

The goodness of others is thus manifested to the child in two ways, through his feelings and his understanding. Feeling begets the love of sense, which is natural and innocent, when it is given to those who are the nearest and kindest to him; his understanding begets an appreciative love, which should be independent of the love of sense. If it be measured by the latter, the judgment is falsified and error and immorality follow; but, if it exist side by side with the love of sense, yet remains unaffected by it, no harm is done. The appreciation, in which, as in germ, lies the whole of morality, remains sounds and true.

The possibility of this deviation from the right track by

a child of such tender age will be better understood if we consider that his appreciative volitions begin even earlier (no. 184); that he has already framed for himself abstractions from actions, and from the goodness and excellence of actions; that he can attribute them to a subject, and can, therefore, judge the subjects by their actions. His judgment will be sound if he does not arbitrarily condemn those whom he does not know to be guilty, and takes account of all the elements of good he can and does know, although he cannot have felt and experienced them all. Already two distinct things coexist within him, the experience of good and the knowledge of good. It is on the latter, not the former, that his judgment should be formed.

393. And here let us note that, as soon as the child comes to know an intelligence, he forms a certain idea of it, as unlimited and infinite in its dignity and goodness. But this idea of its goodness is perpetually being lessened, whether from painful effects arising to himself from that intelligence, or from his affections being set on some one finite intelligence and, therefore, withdrawn from others, or from imbibed prejudices and errors, or any other cause. These limitations are rightful in so far as they are true, and, if true, they cannot take away from intelligence its essential character of goodness. The beneficent effects of the intelligence are not what we love and appreciate; they are only the data on which we found our love and appreciation of the intelligence whence they proceed, and of which they attest the goodness. Hence, appreciation is not subjective, looking to the good effects experienced by the subject, but always objective, and finding its term in intelligent natures. This being premised, it follows that the knowledge of a greater and better intelligence - such as the Supreme Intelligence - should lead us to a higher appreciation of it, even though we should not experience its effects. It is, as we have said, the potency of goodness, rather than its effects with regard to us, that we ought to love: it is the dignity of the intelligent being, rather than the accidental benefits it confers, which is the object of the moral act of appreciation.

Nevertheless, it is certain that the amount of goodness we experience is one means of helping us to recognize the dignity and excellence of the intelligent, beneficent being. Let us see, then, what is the child's moral principle at that age; which is the variable and which the invariable part of his morality.

The principle and invariable part of the morality of a child at the fifth period is this:

He esteems intelligent beings according to their dignity. I say 'of their dignity,' not 'of their goodness,' solely to indicate that the object of moral esteem is found not in the effects of goodness, but in the cause of those effects, which has such an intrinsic goodness that it may be fitly termed dignity and excellence.

This principle to which the child has attained, though he is unable to put it into words, is so perfect and complete that it will never fail him, however long he may live and whatever may be his future development. He will never change his earlier moral principles, be it observed; he will only round and complete them.

394. But, this principle being safe, there remains a variable part in the child's morality which is found wholly in the applications he has to make of the principle.

It is evident that, to apply it, he must first determine the degrees of dignity belonging to the intelligent beings known to him. But, as I have already pointed out, the data he possesses for this judgment vary. Hence, the older he grows, the better he will be able to form a right judgment as to the degrees of dignity belonging to the intelligent beings he is bound to honor, and which of them is to be preferred before others. He is thus led to a successive modification in the form of his morality.

D. - Beginning of Abstract Moral Principles, as distinguished from the Concrete.

395. The period at which the child begins to perceive that he must compare together the various intelligences known to him and their respective wills, so that in the conflict of duties, he may choose the highest, is of the utmost importance in his moral life, and deserves that we should pause a moment to consider and reflect upon it.

In the first place, we must observe that this is the period when the mind passes from *concrete* moral principles to abstract or ideal principles. This is a passage of infinite importance. Let us try to form a clear idea of it.

That an intelligent being, on first perceiving or recognizing another intelligent being, rejoices and feels impelled to love and esteem it,—this is assuredly a moral fact. That an intelligent being, in whom this love and esteem have been awakened, should, likewise, incline to, and strive to bring itself into conformity with, the sentiments, thoughts, and will of another intelligent being, as soon as they become known to it, is also a purely moral fact; for every act of an intelligent will towards a being of like intelligence is a moral act.

But morality, in this first stage, although good in itself, is as yet spontaneous and not voluntary; the will is gently moved by that human instinct which lies in the very essence of the soul, without needing any previous deliberation.

Moreover, when the child performs the above-mentioned moral acts towards intelligent beings, he undoubtedly feels the moral necessity of so acting,—the peremptory claims of the beings he perceives; but he does not separate these claims from the beings that make them; he does

not abstract them into a distinct conception, much less formulate them in words; no. they are to him a real-ideal thing of which he feels the power. The nature of the intelligences communicating with him is a real effect; the child's own conception of it is something ideal. From the union of the real effect and the idea arises that which I have called the concrete moral principle, and which is an intellective moral sentiment on which the human being acts through the moral instinct arising from that sentiment.

396. But the whole state of things is changed, when the child, unable to conform himself at the same time to two contrary intelligent wills, is called upon to decide which is the better, and to hold to it.

This choice may indeed be natural and spontaneous, when only subjective good or sensations are in question.1 may also continue to be made for some time in virtue of the moral sense, because the moral claim, felt by the intelligent moral soul as a spiritual force, asserts itself on the one side, and makes the child recognize the need of admitting it, under pain of contradicting his moral nature. I do not pretend to determine how long that time may last; but, however long it may be, the moment must come when the question will cease to be one of affection, and will become one of appreciation between intelligent beings, especially when language has given the means of abstracting from these beings the notions expressed by the words, good, beautiful, etc., goodness, beauty, etc. These abstractions are necessary to enable us to establish a true comparison between two or more beings, and to mark which of them has the greater moral dignity.2 When they are once formed, we can, by their means, recognize which among several beings has most of goodness or beauty, etc.; in one word, which is highest in being or dignity.

¹ See, for the operations of spontaneous will, Anthropology, nos. 632-635.

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It is evident that, when the child has come to judge of beings in this manner, the beings themselves and their action upon him have ceased to be his supreme moral standard; for he has arrived at a higher standard, by which he judges them and their actions. This standard is, precisely, the abstract notion of goodness, beauty, etc.; in a word, the dignity of the being.

397. Let us now compare the two standards. The first creates the actual intelligent being, making itself and its moral claim known to the child; the second is the abstract idea of goodness or of dignity, by which he measures the degrees of that moral claim. The first, then, may be called a concrete standard, because it is something real, making itself felt, to which the being feeling it has added the ideal element necessary to complete the intellectual perception. The second is a mere idea, without any concrete reality; an abstract notion, communicated to the mind and not to feeling.

In the earlier moral stage, the standard or law has no separate existence for the child; it is identified with the beings towards whom his morality is exercised. In the second stage, this law exists independently of the beings who are the objects of morality; it belongs to an ideal world, the world of possibility. If no being were yet in existence, the standard we speak of would equally be conceived as necessary, eternal, referring to possible beings likewise eternal, and not requiring the existence of any real beings.

At the first stage, the demands of the moral act are two only: (1) the doer of good or evil; (2) the object to whom good or evil is done. At the later stage, the three elements of morality are fully developed and distinct: (1) the doer of good or evil; (2) the object of his good or evil action; (3 and lastly) the standard or rule by

which it is done. It is only in this last case that morality finds its completion, and that its form, hitherto involved like the folded leaves of a rose, within its calyx, is fully developed.

B.-Increased Difficulty of Right Moral Conduct, from the Appearance in the Mind of Abstract Moral Standards.

398. The passage from concrete to abstract moral standards marks a great step in the moral development of man, considered only as a development; but does it aid or injure the moral goodness in man?

That it opens to him a door by which he can ascend to a higher moral perfection, and that this was the intention of nature, admits of no doubt. From that hour, then, the vocation of man, of humanity, becomes more august; everything depends on his responding to it worthily.

But is it an easy thing to enter this new arena and to run its course successfully? Is the moral goodness to which he is called, from the moment he is in possession of abstract standards, as easy for him as that to which he was destined, when his standards of action were still concrete?

It would be empty flattery of human nature to assert that this new and more excellent kind of morality, which consists in following the abstract standards of action, is easier for it than that of which the standards are concrete. It will be difficult for man to be good in this second stage of his moral life, in proportion to the higher standard of goodness by which he will be judged. Let us seek some explanation of this increased difficulty.

399. In the first place, at the earlier stage, nature was his steady and gentle guide: he was led by spontaneous impulse, which always inclined truly, like the scales of a balance, where a simple scruple on one side or the other ends the equilibrium. At the second stage, on the contrary, man cannot act at once on the moral impulse of nature.

Before he can act rightly, something more is required of him. He must first apply his abstract notion and judge of the relative value of entities. This, of itself, increases the difficulty. Moreover, this judgment must be impartial. To decide that one being is better than another requires that we should weigh solely what we know of it and all that we know of it: previous affections and sensations should count for nothing, except so far as they give indications of goodness to the intellect. But how hard it is to preserve this integrity and impartiality of judgment in the use of his intellect, for man who is not pure intellect, but is full of animal and sensible wants, for the satisfaction of which he would always like to be backed even by intelligence,—I mean, by its judgment!

If the nature of man were perfect, without any admixture of evil, its sensations and instincts would be confined to their proper sphere. They would, perhaps, produce actions independently of the intellect (unless the proper force of the latter—the will—should oppose them); but they would not propel the intellect itself, or attempt to warp it into precipitate, rash, or false judgments. The two forces of affection and will would act of themselves, side by side, and thus, the judgment of the understanding remaining uncorrupted, there would be no immorality.

But the actual fact is too often the opposite of this. Man has feelings, and becomes the slave of his feelings; he is not satisfied unless he can press the understanding into their service also; and thus he compels his reason to pronounce in their favor, without examining, or even seeing, the truth.

The judgment, thus urged to pronounce, before a matter is made clear, can be preserved from error only by a great practical bent in favor of truth and virtue.¹ This may show itself and be cultivated in earliest infancy, even before the struggle begins; but, if this is neglected, there comes a time when the child has, on one side, an abstract standard, according to which he should judge; on the other, stronger passions, which clamor for judgment in their favor. The former shows him the way, but does not impel him into it; the latter impel him, but hide from him the right way, and he is without natural strength to resist their incitements.

F .- Difficulty of Perfect Truthfulness for the Child.

400. We have now the explanation of the great difficulty which children have in keeping steadily to truth in their statements.

Mme. de Saussure observes that "every action which does no immediate harm to any one seems innocent to the child." The reason is that, to recognize the guilt of an action which harms no one, the child has to use an ideal standard; whereas, to recognize the guilt of an action which inflicts pain requires only a concrete standard. But an ideal standard escapes his attention and makes little impression upon him; whereas a concrete standard moves him effectually.

Let us apply this general principle to the particular case of veracity, which stands thus: "Children who are so frank, so naïve, are not always quite truthful; they dissemble and exhibit a singular mixture of cunning and openness. Sympathy, that instinct which has so marvelously developed

¹ The standard or law is, in itself, an idea and, as such, it can guide, but not impel, a man. The force which impels man to act in accordance with the idea is found in the energy of his will, which is drawn out by the beings in whose favor the abstract law has pronounced. The concrete standard, then, is not excluded, but rather remains, as a well-spring whence man draws his practical moral force.—See, for the full exposition of this doctrine, the Storia Comparativa e Critica dei Sistemi intorno al Principio della Morale, C. V., a. vi.

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them, tends rather to mislead them in the use of language. In very early childhood, they consider it rather as meant for amusement, or for obtaining what they want, than for expressing truth, of which they have little idea. Why should the child make his words agree with facts? What is the past, the historical truth, to him? He scarcely remembers it. What interests him is to be fondled, to get what he wants. You may cross-question him, as much as you like, as to what he has done; he will give you no other answer than the one he thinks you wish for. I have done what would please you, would be his natural answer at two years old.1 . . . A kind of cunning seems innate in children: when they have learned to avoid falsehood in speech, they deceive in action. It is even a very complicated form of artifice. Yet the poor children do not make very profound combinations; but they seem born with certain instincts of hypocrisy, quick and subtle at the same time."2

These facts show how small is the influence of the abstract standard on the mind of children.

When truthfulness is at one with sympathy, *i. e.*, with the instinctive benevolence towards others, it is preserved. It is in that case that the child appears so frank and ingenuous. Even when truthfulness is not actually opposed to sympathy, though not aided by it, it retains some power over the child: he quite understands that words should express what is really thought, that this is tacitly agreed upon among men, and that whosoever opens his mouth to

¹ The same habit of untruth is found in savages; but, in these, there is already a developed selfishness, which does not exist in the child of two years old, who obeys his instincts rather than his false judgments. The savage deceives the stranger who asks his way, though he knows it will be a serious injury to him to be put on the wrong track. He cares nothing for the injury; he desires and intends it rather: he cares only for his own interest, at whatever cost. The child would recoil from it, if he saw that his filb would injure his mother, from whom he wants to get a sugar-plum or a toy.

² Mme. de Saussure, L. III., c. iv.

speak, is, by that act, under an obligation to observe this agreement, and to use words to express what is true.

But all this gets confused in the child's mind, or, at least, loses power over his will, when a sympathetic affection, or a sensation of any kind, comes into collision with the rule of veracity. It often happens that he then finds two moral standards at issue, the one concrete, that of benevolence, the other abstract, that of veracity. The first prevails over the second, although the second has far the greater authority in itself.

401. Truthfulness has two reasons to recommend it. The one is its general utility to mankind; the other, the intrinsic value of truth; and the latter is the direct and intrinsic reason.

The principle of general utility to mankind is included in the principle of benevolence already known to the child; but he cannot take it into calculation; and, even if he could in some degree, yet as soon as he found it clashing with a present and felt utility, the more ideal and general would yield in his mind to the lesser, but concrete and immediate, utility. Scarcely, at that age, has the child learned to subordinate one or two means to an end (no. 310); and the calculation of universal utility, following upon constant veracity, presupposes the subordination and coördination of a large number, and of a considerable series, of means to the end of that general utility.

There is no great difficulty in immediately conceiving the intrinsic necessity of truthfulness. As we have already seen, every child, when undisturbed and untempted by passion, sees and admits it. But this perception has no power over his will, when the latter is preoccupied by his affections for real beings. His attention is absorbed by the thing he loves; and he voluntarily forgets, or rather leaves out of consideration, the necessity of truth, which yet is ever pres-

ent to him, however he may strive to look in every other direction not to see it.

402. If we wish to reason out in words the duty of veracity, we may do it as follows: Whosoever speaks to another tacitly engages to speak the truth, using words according to their current meaning. Those to whom he speaks acquire, by that fact, a right not to be deceived. This right is of great value to the intelligent being, who abhors being deceived, even when he has no scruple in deceiving others. Thus, the child feels anger against any one who deceives him, by telling him what is not true, thereby showing that he quite feels deceit to be an offence towards a reasonable being, a violation of the dignity of the intelligent being, whose highest good is truth, whose proper evil is falsehood. Therefore, falsehood is sin, and truthfulness a duty.

To feel the force of this deduction of the duty of truth, we must first thoroughly understand that the possession of truth is a great good, and most precious, to the intelligent being; that falsehood is an evil to such a being, and deceit an offence against him. It is undeniable that the child understands all this, but equally so that it has little power over his will. The reason is that truth is an ideal thing, the value of which, though he feels it, does not greatly impress him; nor can he sufficiently dwell upon it, his mind being naturally taken up with real things. To the sublime idea of truth the child gives but a passing glance, without being arrested by it: he uses it as a means, but never looks at it steadily and directly as an end, an object: it is too commonplace, too clear, too evident, too old a matter to interest and occupy him in itself; this is the future work of the disciplined mind, of the heart chastened by the long practice of virtue.

its effects. It is, as we have said, the potency of goodness, rather than its effects with regard to us, that we ought to love: it is the dignity of the intelligent being, rather than the accidental benefits it confers, which is the object of the moral act of appreciation.

Nevertheless, it is certain that the amount of goodness we experience is one means of helping us to recognize the dignity and excellence of the intelligent, beneficent being. Let us see, then, what is the child's moral principle at that age; which is the variable and which the invariable part of his morality.

The principle and invariable part of the morality of a child at the fifth period is this:

He esteems intelligent beings according to their dignity. I say 'of their dignity,' not 'of their goodness,' solely to indicate that the object of moral esteem is found not in the effects of goodness, but in the cause of those effects, which has such an intrinsic goodness that it may be fitly termed dignity and excellence.

This principle to which the child has attained, though he is unable to put it into words, is so perfect and complete that it will never fail him, however long he may live and whatever may be his future development. He will never change his earlier moral principles, be it observed; he will only round and complete them.

394. But, this principle being safe, there remains a variable part in the child's morality which is found wholly in the applications he has to make of the principle.

It is evident that, to apply it, he must first determine the degrees of dignity belonging to the intelligent beings known to him. But, as I have already pointed out, the data he possesses for this judgment vary. Hence, the older he grows, the better he will be able to form a right judgment as to the degrees of dignity belonging to the intelligent beings he is bound to honor, and which of them is to be preferred before others. He is thus led to a successive modification in the form of his morality.

D. - Beginning of Abstract Moral Principles, as distinguished from the Concrete.

395. The period at which the child begins to perceive that he must compare together the various intelligences known to him and their respective wills, so that in the conflict of duties, he may choose the highest, is of the utmost importance in his moral life, and deserves that we should pause a moment to consider and reflect upon it.

In the first place, we must observe that this is the period when the mind passes from *concrete* moral principles to abstract or ideal principles. This is a passage of infinite importance. Let us try to form a clear idea of it.

That an intelligent being, on first perceiving or recognizing another intelligent being, rejoices and feels impelled to love and esteem it,—this is assuredly a moral fact. That an intelligent being, in whom this love and esteem have been awakened, should, likewise, incline to, and strive to bring itself into conformity with, the sentiments, thoughts, and will of another intelligent being, as soon as they become known to it, is also a purely moral fact; for every act of an intelligent will towards a being of like intelligence is a moral act.

But morality, in this first stage, although good in itself, is as yet spontaneous and not voluntary; the will is gently moved by that human instinct which lies in the very essence of the soul, without needing any previous deliberation.

Moreover, when the child performs the above-mentioned moral acts towards intelligent beings, he undoubtedly feels the moral necessity of so acting,—the peremptory claims of the beings he perceives; but he does not separate these claims from the beings that make them; he does

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This choice may indeed be natural and spontaneous, when only subjective good or sensations are in question.1 may also continue to be made for some time in virtue of the moral sense, because the moral claim, felt by the intelligent moral soul as a spiritual force, asserts itself on the one side, and makes the child recognize the need of admitting it, under pain of contradicting his moral nature. I do not pretend to determine how long that time may last; but, however long it may be, the moment must come when the question will cease to be one of affection, and will become one of appreciation between intelligent beings, especially when language has given the means of abstracting from these beings the notions expressed by the words, good, beautiful, etc., goodness, beauty, etc. These abstractions are necessary to enable us to establish a true comparison between two or more beings, and to mark which of them has the greater moral dignity.2 When they are once formed, we can, by their means, recognize which among several beings has most of goodness or beauty, etc.; in one word, which is highest in being or dignity.

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F .- Difficulty of Perfect Truthfulness for the Child.

400. We have now the explanation of the great difficulty which children have in keeping steadily to truth in their statements.

Mme. de Saussure observes that "every action which does no immediate harm to any one seems innocent to the child." The reason is that, to recognize the guilt of an action which harms no one, the child has to use an ideal standard; whereas, to recognize the guilt of an action which inflicts pain requires only a concrete standard. But an ideal standard escapes his attention and makes little impression upon him; whereas a concrete standard moves him effectually.

Let us apply this general principle to the particular case of veracity, which stands thus: "Children who are so frank, so naïve, are not always quite truthful; they dissemble and exhibit a singular mixture of cunning and openness. Sympathy, that instinct which has so marvelously developed

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¹ The same habit of untruth is found in savages; but, in these, there is already a developed selfishness, which does not exist in the child of two years old, who obeys his instincts rather than his false judgments. The savage deceives the stranger who asks his way, though he knows it will be a serious injury to him to be put on the wrong track. He cares nothing for the injury; he desires and intends it rather: he cares only for his own interest, at whatever cost. The child would recoil from it, if he saw that his fib would injure his mother, from whom he wants to get a sugar-plum or a toy.

² Mme. de Saussure, L. III., c. iv.

ure, unless the objects which it presents were in themselves pleasing? It is, then, not activity, merely as activity, which makes the child delight in the imagined objects; they must have some other attractive quality which he finds and enjoys in them. What is the nature of this attraction?

If, as we have seen, it is not the reality of things, which to him is wretchedly poor and narrow, that gives him pleasure, it must be the metaphysical entity of the things; in other words, he delights in the object, as object, caring little whether it be real or not; he contemplates and enjoys the nature, the essence of things; it is by this that he is charmed and captivated.

This contemplation is full of delight, indeed, but it is wholly disinterested, and all the nobler that it is disengaged from the frigid reality. It is the instinctive desire to learn and know the being of things which impels and absorbs the child in the inward contemplation of his own spirit, regardless of the things without him: he is carried away by the craving of his mind to find, as it were, being, — as much of being as it can, — the degrees, the intrinsic order, the forms of that being, which are, in fact, the essence of finite things, and to feed upon it, as the noblest of food, vital, celestial.

The objective, the entity in itself (not real, not ideal, but abstracted from these its primordial modes), is that which I term the metaphysical world. At this age, the child spreads his wings and flies towards it fearlessly. His mind clings to it with the same pleasure as the infant's lips to the mother's breast. This is the reason why, down to our day, so rich in experience, novels are so eagerly read. Does any one read them because he believes them to be true, and the events they relate to have actually happened? That would be simply childish. In reading them, we want to know about human nature and its modes of action. We

want to learn about the human heart, to see the bent of passion, the inner recesses of that heart, which, beating in so many different individuals, yet remains the same in all. In the same way, we look at portraits to know what the world of to-day is like; we care nothing whether the painted image be intended for Mr. or Mrs. So-and-so: that is a matter-of-fact detail so unimportant, tiresome, and foreign to what we are looking for, that to know it would rather annoy than please us.

412. The desire to know things as they are in themselves, in their objective essence, rather than in their accidental reality, is identical with the desire for knowledge. Knowledge, in its formal part, being nothing more than this, a man is not more learned and wise for knowing more or less of real and positive things. And this desire is one of the most powerful instincts of human nature: the mind throws itself into objective being, as its proper good, as soon as this is possible for it, as soon as it sees the way open to seize, were it only a crumb of it.

This powerful tendency of the intelligent mind to contemplate things as they are in themselves, and not as they are in the real world, throws light on many phenomena of human life. It will suffice here to point out the one which is most closely related to our subject. This is the ease and the rapidity with which the mind passes, and is compelled to pass, from one to another of similar things, that is, to make the one serve as a sign or indication of the other. No matter though the likeness be slight, the sign imperfect, deserving the name rather of an indication than a representation,—the mind does not dwell on that imperfect reality, as we saw in the case of the wax or paper figures; it passes on immediately to the true man, not, be it observed, the real man, for the child cares nothing about the existence of the latter; he cares only for the man of whom he has already



received the idea into his mind; and precisely in the idea lies the essence. So true is it that this spontaneous passage from one thing to another, as different from it as a wax or paper figure from a man, is the result of the instinctive force which continually impels the mind to look to things as they are in themselves, such a passage, if we consider it, being always the passage from an external and material thing to an internal and objective one. And, even when it takes place from one external thing to another equally external, the mind always passes from the external thing to look, first, at that within itself, and then, from this internal thing, it goes on to the other external one.

The same observation explains the possibility of language. Note that the greater number of the sounds which make up speech indicate things as they are in their nature, not as they actually subsist. Now, how would it be possible for a child, on hearing the sounds, to think of the things to which they bear this analogy, if he were not inclined by nature to rush in thought to things as they are in themselves. at any impulse from without? Any one who has seen a school of deaf-mutes, and the incredible facility with which they learn to understand things from signs, will be con-The teachers have no need to tell the vinced of this. pupils beforehand that the gestures they use are signs: that is presupposed; they know it of themselves; for nature has taught it to them. It is nature it at impels them to consider all external things, and not only the gestures of their teachers, as signs of other things—of the nature, of the essence of things. But for this the ug of nature, it would be a hopeless task to make the nature that the property of the conception of a thing as a sign, and above all, as a conventional sign, is in itself so difficult, so in bitrary in its meaning, and, I may add, so strange and wonderful, that if it had to be reached by reason, not by instinct, it would be impossible

for children, idiots, and deaf-mutes to receive, retain, and act upon it, as we see them do daily, without the slightest effort. Man cannot rest in the real. He flies from it as the arrow from the bow, to reach, and plunge himself in, the nature of things, which is the object of his intellectual contemplation. Hence it is that, far from finding it difficult to think of one thing as the sign of another, he rather finds it impossible not to consider all real things as signs. Here we have the explanation of language, hieroglyphics, writing, mimetics, symbols, myths, all the arts of imitation, the most ancient language of enigmas, the wisdom in parables of the earliest peoples, of God's teaching of man ever by signs and figures, the interpretation of every occurrence by signs, whether falsely and arbitrarily, as by auspices, augurs, diviners, magicians among all nations, at all times, or truly, by inspired men, beginning from the early prophets, to whom God spoke in visions and signs, down to the Fathers of the Church and the interpreters of the Holv Scriptures, who, in the simplest facts of the Gospel, see, as it were, signified, moral and most profound mysteries.1

ARTICLE III.

MORAL INJURY FROM THE DEVELOPMENT OF IMAGINATION.

- 413. The tendency of man to contemplate things as they are in themselves is essentially moral, precisely because it is essentially objective and entirely forgetful of the subject.
- If, then, the imagination developed in the child produced only this effect, if it were only an increase of the intellectual
- 1 St. Augustine, in his golden little book, On the Way of Catechising the Ignorant, points out, as one means of pleasing a popular audience, the explaining and unfolding of such Scriptural passages as are mystical and figurative (Ch. XIII). That the Christian plebs should have found delight in this, results from human nature itself.
- ² How morality consists wholly in adherence to the objects of the mind, may be seen in the *Principi della Scienza Morale*, C. IV.

contemplation of things in their metaphysical being, undoubtedly it would assist moral goodness, without any countervailing evil. And so it would be, if the human instinct, which directs the action of the faculties, had no other motive power than the tendency of the intellect to fix itself on the being (entity) of things; but it has another motive power, *i. e.*, the pleasure it finds in the real.

We must remember that man is a real being, and therefore tends to real enjoyments. Although his intellect takes pleasure in the light of truth, in the vision of essences, yet there is in him another tendency, by the side of the first, which impels him towards all those real things which can give him pleasure. Thus, we see that human instinct has two impulses, the one towards being, considered in itself, the other towards real being. These two impulses must guide the action of our minds into different channels. The purely intellectual tendency to behold things in their essential being draws us away from the real, with which it has nothing to do; the tendency to enjoy the real brings us back to it.

Hence it happens that what the child imagines he often looks upon as the essential nature of a thing, without troubling himself to inquire whether it be real or no. When this tendency prevails in him, he starts from the real, as a symbol, and ends at the essence of the thing, as that which was symbolized. The essence is here the end of the mind's action; the contingent, the real thing, is only its starting-point and occasion.

But if, in the real, he conceives something pleasant, and thus the second tendency comes into play; his mind takes the contrary course: i. e., whatever he imagines, he easily believes to be real. In that case, his mind travels in precisely the opposite direction; it starts from the imaginary, and arrives at the real: imagination is the initial point, belief in reality, its term.

414. It is plain that we have here the origin of many childish errors; for, as the mind, starting from the real, and seeking being as it is in itself, finds, and holds by, the truth, so, when it starts from the imagination and contemplation of the entity in itself and comes to see it as the real, it finds and embraces a falsehood.

There is, indeed, an element of reality in imagination itself; for it is feeling that is affected, and feeling is a reality and can be modified only by some real action. When our feelings are in any way affected, we conclude that a real agent exists; nor, so far, are we mistaken. Our error begins when we try to determine what this real agent is, and decide that it must be that which it appears to be. This illusion is complete in dreams; we never doubt the reality of the things they represent to us; for the representation, i. e., their action on our feelings, is perfect. Even when we are awake, if an image presents itself vividly to us, we are deluded by it, and, in spite of the effort of reason to undeceive us, we are moved as strongly as by the reality.

"Illusion, when it reaches a certain point in the child, ceases to be voluntary: he cannot shake it off, and thus a sense of fear comes over him. As he begins to doubt whether it is not more than play, he fancies himself on the brink of an unknown world, full of terrifying realities. Dance a rather large doll in front of a child of two years old, he will be delighted by it, so long as the motion is gentle; but, if you toss it very high, making the arms move violently, he may, perhaps, laugh louder, but he clings to his mother, and his sudden changes of color, from red to white, show his internal disturbance. Those who have the gift of changing their faces by grimaces and gesticulation, often amuse themselves with the startling effect they produce on children; but we may observe that the children's pleasure is unalloyed only so long as they can recognize frequently the natural

either good and evil, or wish to deceive himself; nor is he responsible for the creations of his fancy. But, if the latter be excited by external objects acting upon him, then he may be deluded by them, first, in the two ways above mentioned, and, later on, in the third. A good observer says: "Children, left to themselves, may be frightened by a real object, —a negro, a chimney-sweep, a mask, —and recall it with terror; but they very seldom invent phantoms for themselves. It is rare for them to be preoccupied by an idea which has not been suggested to them." This fact proves that they are made for the truth, and not for illusions.

416. To such illusions they are driven by the action of external impulses. But to those which are voluntary, which we have declared to be morally dangerous, they are impelled solely by their own desires and affections. These regard either the past or the future, and direct imagination, so that it represents only that in either which is pleasant. Before this can occur, the child must have the conception of time, which greatly aids the activity of imagination, expatiating on the things that have happened and those expected to happen. The conception of these two modes of time is formed in the child's mind, as we have seen, when it has reached the fourth order of cognitions; that of the three modes of time, the present, the past, and the future, is formed at the fifth order, and thus we see why voluntary illusions begin only at this age.

These voluntary illusions are the result of allowing pleasure and pain to guide memory and imagination. The child, under this impulse, remembers and imagines vividly whatever gives him pleasure, forgets, and has no imagination for, that which displeases him. It has been observed that "the child is a stranger to the feelings of yesterday. An accident which has been his fault is a past like any other, which ought not to be recalled. Every morning he wakes up with

the renewed feeling of innocence, and believes himself fully justified from all wrong-doing by simply saying, 'That was yesterday.'" Nevertheless, when the future is near and pleasant, he looks to it willingly enough. He will count the days to the holidays, and definite promises have a great influence over him. Threats, however, have the contrary effect. A distant pain is nothing to him. He does not believe in evil beforehand, and puts away the idea of it by simply saying: 'It will not happen for a long while.'"

The imaginary hopes of childhood begin with the idea of future time and help to form it; for these hopes mark points in the future, as pleasures enjoyed and remembered, far more easily than pains mark points in the past. the harm does not lie in the child's preference for the pleasant representations of the past or the pleasant expectations of the future, which is only natural. But, that he should give substance to these images, and, impelled by the love of pleasure, should choose to believe them real, this is the error which springs from an evil principle, and indicates a mind already warped from moral rectitude. If we look at the way in which the children of great people are spoiled, we shall find that the evil comes of allowing them to create an imaginary world for themselves, in which they occupy an equally imaginary position, and their thoughts and actions, starting from this false idea, are continually wronging the real persons of the real world, and making a continual abuse of the things that are real. Poor children! Their thoughts, their judgments, their affections, their habits, all rest on a false foundation: they are betrayed by imagination, but only because the latter has been used as the magician to deceive and destroy them by parents, friends, teachers, and all about them, in fatal rivalry.1

¹ On the mischief of bringing up a child in an unnatural position, it will be well to read Madame Guizot's sixth letter.

417. This species of immoral errors is seen on a far larger scale in the history of the infancy of nations. latter have not contented themselves with creating a multitude of phantoms: they have made them real beings, of which idolatry is a proof. And idolatry is not found only among the ancients or among savages: it has been truly said that it exists among Christian and civilized peoples; for, wherever excessive passions exist, they demand idols of the imagination, in which they may believe, before which they may fall down and worship: they demand that it shall enlarge and metamorphose the boundaries of the real world and create within it another, more pleasing to their fancy. How true this is, must be felt by all who have observed with any care the boundless delight of mankind in self-delusion. It is evident everywhere. In society, men want to be cheated by soft words, and are irritated by those who are too sincere and honest to deceive them. In literature, as in art, there are still some who lament the loss of mythology. or try to invent it anew. In history, we refuse to accept bare fact, or to believe it, unless recommended by some fable which it enshrines.1 It is the same with events and words; we are impelled by some occult force to give subsistence to that beloved imagination which has truly none. This it was that made Plato dread the poets and admit in the education of youth only lyrical poetry, which sang hymns to the gods or the praises of virtue and the virtuous.2

^{1 &}quot;'Listen to a true story which happened to me,' said an English colonel to his Indian hosts, and related to them one of his extraordinary adventures. They would listen, and then exclaim, 'That's not true,' in a tone of suspicion and contempt. 'Listen, then, to a fable,' he would say again; and they would cry out, 'Tell us, tell us,' and hang breathless on his words. I do not know whether the readers of civilized society differ much or little from these poor dwellers in the wilds. I cannot tell why truth does not appear true enough to men to awaken a true affection." N. Tommaseo, Della Bellezza Educatrice, Pensieri, P. IL XVI., c. iii.

² See the Phædo, De Leg. II., and Rep. X.

ARTICLE IV.

/HE SELF-CONSCIOUSNESS OF THE CHILD AT THAT AGE, CONSIDERED IN RE-LATION TO MORALITY. — MORAL EVILS. — SELFISHNESS.

418. At this point an important observation has to be made. The errors which arise from the development of fancy, and which I have shown in the last chapter to be dangerous to the child's morality, change their nature, according as they are considered at the age when man has not yet the consciousness of himself, the concept of the I, or at the later age, subsequent to his having attained that consciousness and concept.

So long as man is ignorant of the meaning of that monosyllable *I*, he is only a substantial feeling, acting by the laws of spontaneity: these laws are inherent in his nature, whether considered in its perfection or in its natural corruption. But, from the moment that he has perceived himself, an immense change takes place in relation to his free moral action.

It is evident that a subject which has not the intellectual perception of itself cannot make of self the object and end of voluntary action. For the will is that which acts towards an object known to the intellect, and, if the man has not yet become an object to his intellect, he cannot be the object of his will. Previous to the time, then, at which man acquires the consciousness of himself, knowledge of the *I*, he acts subjectively, indeed, but cannot make himself the fixed aim of his actions. So soon, however, as he has attained that consciousness of self, he can make that self the term and scope of his will and action. What an immense revolution is thus introduced into the moral world of the child!

419. Selfishness 1 can begin only when man understands

¹ Merely subjective action, that is, the action of feeling not making an object of the subject feeling, is in itself neither interested nor disinterested, as I have shown in the Comparative History of Moral Systems. (Storia comparativa de'Sistemi morali), C. IV. art. iv. to which I refer the reader.

himself. With the notion of the I begins, then, the possibility of true selfishness.

It is true that, even before he attains self-consciousness, a man may fall into moral error; but the nature of the error is different. It can consist only in the violence of spontaneous subjective impulse, leading to action against This is, undoubtedly, a fault; but it is objective claims. rather indirectly and negatively wrong, than a direct and positive transgression. Let me explain: If two objects are before me, and I prefer the less to the more worthy, I may do it in two ways: first, I may be urged by a blind instinct to such vehement and rapid action, that I do wrong to the worthier object, not because I contemn it or prefer the less worthy one, but solely because I am carried away by the force of the blind impulse, which does not stop to consider the objects, and prevents my making any comparison or judgment of their value; second, I may deliberately and freely choose the pleasure or advantage I find in the less worthy, in preference to the intrinsic value of the more worthy. In the first case I do wrong, indeed, but only indirectly and negatively, rather through the weakness and corruption of my nature than out of malice. In the second, I do wrong directly, positively, with malicious intent. Now. this second way of sinning almost always presupposes the consciousness of self; it is a form of sin which generally, at any rate, arises from selfishness. For, if I deliberately choose between a pleasure or benefit to the subject, self, and my duty, I must have made this subjective pleasure or benefit, which I prefer, an object to my own understanding, so that the latter has that actual knowledge of it which prompts the will, not the mere feeling which begets the instinct; and, if this pleasure or benefit concerns myself, if it consist in some aggrandizement of myself, if, in short, it belongs to my substantial feeling (that which I myself am), I must be conscious of myself to conceive it, and this consciousness must, in any case, awaken and take form in the very act of choice.

Thus it happens that, by his consciousness of self, man introduces into his perversity the most fatal of its elements, selfishness, by which he makes himself the end of his actions and sacrifices all else to himself.

ARTICLE V.

CONTINUATION. - TWO DEGREES OF SELFISHNESS.

420. The selfishness which consists in making self the end of action, and which first appears at the age we are considering, has two degrees: (1) that which is born of forgetfulness of others and thought of self only: (2) that which fully considers the interests of others, but only to sacrifice them to self. It is evident that this second degree is far worse than the first.

The first is mostly the offspring of ignorance, and belongs to uneducated people. "A person whose mind has never gone beyond its own immediate concerns, is naturally least disposed to consider others. We know how difficult it is to make the lower classes understand anything which interferes, in the slightest degree, with their own interest. The more ignorant they are, the greater is the difficulty; and it lies not only in their knowing nothing beyond, but mainly in this, that they can think of nothing beyond that which interests them personally. By learning to carry our thoughts beyond ourselves, to exercise our judgment on objects unconnected with ourselves, we acquire the power, and form the habit, of considering objects in themselves, and not only in relation to us. Knowledge generally preserves us from the narrowness which gives importance to insignificant things. We acquire soundness of judgment from the habit of comparison, and, the wider the circle of our thoughts, the less

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are we prepared to make much of that which concerns ourselves." This is the kind of selfishness which, in the world, interferes with, and bars, the noblest schemes, and when these have to be discussed in an assembly, it often happens that one or another individual gets up and opposes a great public good, on the ground of some infinitesimal private interest; the most frivolous reason, a mere inconvenience which vanishes into nothingness, when compared with the benefit of the proposed measure, being sufficient to throw it out.

It might be supposed that, in small countries, where passions 2 are not so much excited, and the number of voters is smaller, the schemes for public good would have a better chance; but this is not the case: what is wanting in violence or passion is made up by the selfishness of ignorance.

Children show this kind of selfishness whenever they find themselves with people who indulge them in everything. The habit of getting whatever they ask for prevents their ever considering the trouble they give to others, and they think only of their own pleasure. The character of Sophy, in Mad. Guizot's Letters, is an admirably portrayed example of this.

The second degree of selfishness does not belong to this age; it is the guilt of maturer minds.

ARTICLE VI.

CONTINUATION. - JUDGMENT BY TWO MEASURES. - CHILDISH ARTIFICES.

421. The evil progeny of selfishness is legion. It causes man to apply a different measure to himself and to others, to what concerns himself and what concerns them. This is

¹ Mad. Guizot, Lett. XXXIII.

² The context here shows that the negative has been omitted in the text by a clerical error. — M. G. G.

the fatal evil from which all moral evils take their form, and no watchfulness, no pains, can be too great to preserve a child from it. If education could succeed in maintaining his rectitude of mind and impartiality of judgment in everything down to the most trifling, it would make of him, in a short time, a perfect man.

For the same reason, the cunning of children, their small but frequent untruths, assume a graver character, when they proceed from already formed selfishness. We make a great mistake in judging children solely by external facts, as they appear in their immediateness. The same fact, the same artifice, the same falsehood, may in two different children have an infinitely different moral significance. Insight, the discernment of inward motive, these are the prime gifts of the true educator.

ARTICLE VII.

MORAL APATHY AND RESTIVENESS.

422. In the fifth order are also manifested the moral apathy and restiveness which constitute a most dangerous evil in children.

We have seen that the desire to influence the will of others awakens in the child, in the preceding, i. e., the fourth order, of cognitions, a desire which springs from the conflict between the child's own will, which he does not want to give up, and that of others, which yet he feels he ought to respect and put above his own. But even the necessity of influencing the will of others, in order to bring it into accord with his own, is felt as a burden, a tie upon him, which he will bear only in proportion to his benevolent affections and moral feelings.

¹ At this age, the child does not know his own will objectively; hence, he cannot judge of its moral worth or give it, in virtue of such judgment, precedence over another's. The latter, therefore, alone has a right to the moral respect of a child of that age, his own will not having yet been morally valued.

Now, there are times when affection has no power over the child's heart, and his moral feeling is dull and inert, through his absorption in something else. At such times, his state is deplorable. The will of others is an annoyance to him, every rule an odious bondage. Some monstrous caprice takes hold of him; he persists in it, and delights in the display of his whole physical activity; he feels himself the bigger for rebelling against the law and using, uncontrolled, his natural liberty. Those who have had much to do with children, must be well acquainted with this dangerous moral disease in them.

The obstinacy of a child who, when learning to read, would always say b-a-u, bu, and refused to repeat b-a-u, bau, is thus explained by Mad. Guizot, Lett. IX.:

"Imitation, which is the effect of sympathy, leading men to repeat one another externally, as well as to assimilate themselves to each other internally, is the original source of grammatical usage, as it is also the prime factor in teaching. But the child gets tired of repeating sounds to which he attaches no meaning, and the instinct of imitation alone is not enough to sustain the more active exercise of will and effort of attention you are begin. ning to require from him. He will then try the exercise of will on his own account, and you may expect a fit of obstinacy, all the more invincible that it is utterly without a ground in his own reason, and without a point of connection with yours. You want him to say bau; he chooses to say bu; the one seems to him as right as the other; but, as it is he who has to pronounce it, he feels himself the master and will not let himself be coerced. All attempts to force him will be in vain; he can say to you, as did the singer to the King of Prussia, who put her in prison because she would not sing: 'You have a thousand means of making me cry, but not one of making me sing.' He will find it easier to cry and scream than to pronounce the syllable you require, because he has a reason for crying over what vexes him, but none for doing what he does not like."

We quote the following additional facts, which may be verified by daily experience:

"A little girl, so gentle and docile that she seemed to find her whole happiness in obedience, would every now and then delight in open rebellion. At eighteen months' old, she already showed this alternate desire to obey, and to break through, the rule imposed upon her. One day, being alone with her mother, who was kept in bed by illness, she burst into open rebellion for no reason whatever. She threw upon the floor, in the middle of the room, dresses, bonnets, chairs, everything she could lay her hands upon, and danced and sang round the heap in wild delight, utterly regardless of her mother's serious anger. She well knew she was doing wrong; her flushed cheeks betrayed her pangs of conscience, but her pleasure consisted in suppressing them." 1

Now, although this joy in wild, absolute liberty, this desire to set everything at naught, does not appear all at once, till after the age when the desire to exercise influence in others has arisen, yet it may manifest itself earlier. It presupposes moral apathy and restiveness, cooling benevolent feeling toward others, while dulling the understanding to the admiration and reverence due to the will of an intelligent being. What part the angel of darkness may have in these often fortuitous and momentary phenomena, is a secret hidden from human investigation; they are, assuredly difficult to explain by the ordinary laws governing human nature.

When selfishness already exists in the human heart, the moral disease of which we speak assumes a more serious and malignant character.

ARTICLE VIII.

MORAL ADVANTAGES OF CONSCIOUSNESS OF SELF-CONSCIOUSNESS.

423. The discovery of self by the intellect, in other words, the attainment of self-consciousness, while it may,

¹ Mad. Necker de Saussure, L. III., c. vii.

as we have seen, prove a rock on which moral goodness will be wrecked, may also, on the other hand, become the means of opening the way to a larger and happier life.

And, in fact, the sense of our own moral dignity is not possible until we have arrived at the consciousness of ourselves. This consciousness is necessary to enable man to judge himself, to impute actions to himself, to understand the imputations of others, praise, blame, reward, punishment. Who but must see how incalculably great is this step; how largely the means of moral action are acquired by it; what a new form morality must assume, when the man can reflect on his own action, attribute it to himself, and feel that, if it is good, it ennobles him, if bad, it degrades and corrupts him!

ARTICLE IX.

CONTINUATION.

424. 'Among the moral advantages derived by man from self-consciousness, are the memory of things past and calculation of things to come. The consciousness of self carries with it consciousness of our own identity at different times; the notions of difference of time and of identity of self are relative to each other, and, hence, grow up pari passu.

We have already observed, how "the want of a notion of time impedes the child's moral progress. The blank in the past excludes pain: that in the future excludes fear; and, although the idea of the consequences of actions would be a useful auxiliary to his conscience, yet the child gives it no weight in his decisions, because he cannot see distinctly how facts influence one another. His extreme mobility subjects him to impressions from every wind that blows; his recollections, on which he does not dwell, fade away; and, even if he retained the memory of events, his motives in the past would always be forgotten by him. Too variable to believe himself the same, he does not consider himself

responsible for the child of yesterday, who is not the one of to-day. He lacks that sense of the succession of thoughts which gives us the idea of the *I*, and that of time, both very dependent on each other. An *I*, the immovable spectator of another *I* incessantly modified, and registering these modifications, this is what constitutes our identity, and, through it, the morality of our conduct in life. But in the child nothing is yet fixed."

The gradations by which the child comes to know himself, his own unity, his own identity, are well worthy of observation. There is a time when he can recognize that of others, while yet unaware of his own, for the reason already given, that his attention is first drawn to outward things, and only later on turns back upon itself. At that time he judges others differently from himself, and his judgment would seem to be unjust, and to work with two measures, though it is not really so. In this case, his different judgments of others and of himself does not arise from unfair partiality, but simply from his knowing others in a different way from himself; he perceives them to be the same at

¹ Properly speaking, our identity does not consist in one I, the spectator of another I; for, if it were so, there would be two I's and identity would be wanting. It is, however, true that, when we reflect on ourselves, we are subject to such an illusion and difficulty in perceiving ourselves, that we seem at times two or more beings, and as if two or more I's existed in us. Still, the truth remains, that our identity consists properly in this, that the I recognizes itself as always the same through all the variations which it undergoes. Thus, the I is at once an immutable and a variable subject, and hence its apparent duality. Closer observation, however, shows us that there is no contradiction in an identical principle, the immutable subject of variations; for the variations are actually included in the principle, so that the new appearance is not really a new thing, but only a new form, a new mode of that which existed before, and is the same principle developed, as the consequences of a principle are contained in it, and are the principle itself in larger action. All this belongs to the nature of a finite being, which is identical in potency and action, as a telescope is identical with its tubes more or less drawn out. It is the potency itself which thus alternately suffers diminution or extension; both are there at once, independently of time. But this will be better treated of in the Ontology, should God permit us to produce it.

² Mad. Necker de Saussure, L. III., c. vi.

different times, while he has not yet perceived this of himself, and, therefore, he judges himself as a different person at one time from what he was at another. Let me again quote the observations of another: "Louisa, like all other children, is convinced that the whole thing is over when she has made amends for her fault, or has been forgiven for it. It does not occur to her that it can be brought up again as a subject of reproach, or be used as the ground of an opinion on the whole of her conduct and character. A child, entirely absorbed in the present, connects his fault neither with the past nor the future. If I tax Louisa with having already lost several pairs of gloves, she will answer, 'Mamma, I have only lost one to-day;' and, if I reprove her for a fault constantly committed, she will say, 'But I am not doing it now.' Children never connect the idea of a fault with that of a defect or habit, and the words, 'I won't do it again,' are easier to them than the thought that they will begin again to-morrow doing the same they have done to-day. And thus, unless obliged, they will never apply to themselves a general idea of vice or virtue. A child does not think of himself as good or bad; no general view of his own character enters into his mind. And yet such a view is not foreign to him; for only through its means is it so easy for him to form an idea of the character of If he hears a person spoken of, whether real or fictitious, his first question will be, 'Was he a good or a bad man?' If you tell him the story of the death of Clitus, he will decide that Alexander was a very bad man, and refuse to listen to anything to the contrary; and if he has been moved to compassion by the story of Hagar in the desert, he will altogether refuse to admit that Hagar could have behaved ill to Sarah, and will hold it certain that Hagar was good and Sarah bad."1

¹ Mad. Guizot, Lett. XX.

One fact, therefore, suffices for the child to judge of others, whether they are bad or good; but he forms no fixed judgment on himself, and judges his action only at the moment of committing it.

425. These facts mark out the period, a somewhat long one in childhood, during which the child has come to recognize the identity of others at various times, and can form a single, definite judgment about them as always the same subjects, while yet he has no notion of himself as the same at different times, and judges only his immediate action; with this result, that his judgments vary with the varying quality of the actions, and involve no general or final sentence for, or against, himself.

I have said that this period is somewhat prolonged in infant life; and this holds good for the infancy of nations and for the common people, who, for the most part, remain children always. Why does a nation judge so severely the defects of another nation, but because it considers the latter as an individual, and, from particular actions, pronounces condemnation on the whole body? Whence comes popular passion, whether against those who are the objects of its hate, and in whom no good thing is admitted to exist, or in favor of those who are the objects of its love, in whom it can see no defects?

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INDEX.

Abstraction, 96, 218. Actions, 234. Affection, 69, 130, 147. Analysis, 176, 218. Analytical judgments, 304. Arithmetic, 270, 307. Association, 59, 93, 272. Attention, 45, 50, 80. Augustine, 8t., 149, 345.

Bacon, Francis, 4. Beauty, 130. Benevolence, 68, 143.

Catholic church, 73. Classification, 15, 104. Cognitions, 41. Condillac, 174. Comparison, 18, 301. Correlation, 42. Conscience, 249, 287, 313. Credulity, 283. Critical method, 4.

Deception, 201. Differences, 222, 303. Discipline, 215. Docility, 258.

Edgeworth, Maria, 92. Euclid, 35.

Fear, 348. Feeling, 65, 76, 134. Freedom, 256. Froebel, 82, 341.

Galileo, 54. God, idea of, 107, 250, 280, 333. Guizot, Madame, 257, 351, 356, 358. Habit, 65. Hamilton, Elizabeth, 299. Hope, 351.

Ideality, 179.
Illusions, 347.
Imagination, 86.
Imitation, 65, 358.
Immorality, 141.
Impetuosity, 76.
Incredulity, 245.
Induction, 4.
Instincts, 61.
Integration, 106.
Interests of children, 343.
Intuition, 45.

Jealousy, 153. Judgment, 173, 301.

Kindergarten, 82, 341.

Language, 90, 104, 114, 133, 202, 261, 344.

Leibnitz, 75. Literature, 339. Logic, 3, 35. Love, 155.

Mathematics, 36.
Memory, 57, 92, 112, 264.
Mental errors, 23.
Motives, 88.
Moral activity, 197.
Moral education, 211.
Moral ideas, 278.
Moral rules, 133.
Moral suasion, 257.
Morality, 71, 138, 159, 189, 283, 311
Music, 264.
Mythology, 339.

Naville, M., 128. Necker de Saussure, Madame, 41, 63, 70, 75, 77, 82, 86, 92, 131, 145, 154, 178, 213, 221, 286, 296, 298, 338, 341, 361. Number, 182, 223, 307.

Obedience, 198, 286. Object teaching, 15. Observation, 53, 79. Oral exercises, 204, 265.

Passions, 148.
Pedagogy, 5.
Penmanship, 207, 266.
Perception, 48, 52, 80, 94.
Pictures, 210, 263.
Plato, 9, 104, 352.
Platonic love, 157.
Play, 195.
Polemical method, 4.
Prayer, 74.
Pronunciation, 206.
Prejudice, 363.

Reading, 266. Reality, 179. Reasoning, 34, 221. Recollection, 92. Reflection, 169. Religion, 73. Religious education, 73, 160. Resemblance, 18. Resistance, 146. Richter, Jean Paul, 297. Rights, 197. Rosi, Vitale, 43. Rousseau, 71, 257, 269, 294.

Self-consciousness, 226.
Selfishness, 353.
Sensual instincts, 61.
Shyness, 151.
Similarities, 222.
Speech, 90.
Spello, Seminary of, 43.
Spontaneous activity, 192.
Sympathy, 69, 144.
Synthetic judgments, 173, 310.
Synthesis. 218.

Taverna, 262, 267. Text-books, 10. Time, 232. Truthfulness, 141, 284, 328.

Vocal sounds, 209. Volitions, 66, 71, 255.

Will, 74, 109, 214, 247, 280. Words, 95, 269. Writing, 207, 266. ADVERTISEMENTS.



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